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Archaeological Work in Westmoreland and Fayette Counties 1929

By J. Walter Miles

In recent years we have heard much about the Cro-Magnon Man who probably lived after the fourth and last glacial age. The people of this age buried their dead in caves in which are found stone weapons, ornaments, food and paint. The pigments which they used have endured to this day in the caves of France and Spain. These Palaeolithic or Old Stone Age people have left interesting records on the rocks in their caves and in the subsequent pages describing this year's work, much will be found to indicate the survival in the later people of the ancient Palaeolithic customs. After the Palaeolithic People disappeared they were replaced by the Neolithic or Late Stone Age people about 10,000 to 12,000 years ago. Groups of the Neolithic people migrated north-eastward from south-western Asia and were probably the ancestors of the Chinese and Japanese. Others more adventurous continued north-eastward and finally passed the Behring Strait, which at that time was probably an isthmus, into North America. It is a well known fact that the North American Indian has Mongolian characteristics, which would strengthen the belief that originally they came from south-western Asia, the so-called "cradle of the human race."

In the Behring Strait migration just mentioned there were doubtless some who continued southward to Mexico, and Central America where they found the climate more congenial and permanent habitations were established. From these may have arisen the wonderful civilization of the Maya who lived in the states of Tobasco, Chipas and Mexico from 500 B. C. until about 500

A. D. They built great cities, pyramids, temples and beautiful palaces. Their ornaments of jade, wood carvings, ceramic and mosaics were remarkable for so early a period. They excelled in the sciences then known to the world. This was in fact a great American empire but like the empires of the old world could not forever endure.

In recent years there has been considerable activity in exploration work in connection with these lost Mayan cities and the recent exploration by airplane of Colonel Lindbergh will doubtless yield rich archaeological returns.

What may we conjecture about those of the Behring Strait migration who tarried on the way and did not follow the vanguard into Mexico and Yucatan to participate in the rapid and luxurious development which came to the Maya? Did some settle on the Pacific Coast and others come inland and northward to become the ancestors of the great Algonquin Nation? Did others remain on the western plains and finally reach the Mississippi? If so, the tradition of the Lenni Lenape, Mengwe and Alligewi would seem to be substantiated.

Or shall we take the early work of the Tertiary man found in Nebraska as evidence of his simultaneous development in the eastern and western hemisphere? May we say the age of man is the same in both hemispheres but that they did not develop equally because of unfavorable environments, and climatic conditions?

If we take the former view, we may look for interesting evidences of the Lenni Lenape, Mengwe, and Alligewi, between the Mississippi River and the Ohio River and its tributaries. Over this territory their fierce conflicts must have occurred. In Ohio the exploration work during the last 20 years has disclosed ancient earth work laid out with scientific skill and we are all familiar with the celebrated mounds in Ohio and their rich archaeological contents.

In western Pennsylvania practically no work has hitherto been done and we have only the reports of the early explorers and others who visited this section and found evidences of ancient habitations many centuries prior to the arrival of the white man.

We read the fascinating history of the occupancy of the land between the Euphrates and the Tigris River north of the Persian Gulf by the Sumerian as early as 6000 B. C. On a similar but much smaller scale we have between the Monongahela and Youghiogheny Rivers a narrow strip which judging from the results of last summer's work must also have teemed with prehistoric life of what age we do not know but certainly it was pre-Columbian.

The writer's active interest in the subject began when he was made chairman of a committee appointed by our parent society to assist in the Indian Survey of Pennsylvania, a work hitherto shamefully neglected when we consider the thorough manner in which our neighboring states, Ohio and New York have done their work. The preliminary survey made in Eastern Pennsylvania revealed the great and immediate need for systematic work, so an appeal was made to the Legislature for financial assistance. This resulted in an appropriation of $10,000 to be distributed by the Pennsylvania Historical Commission.

At an annual meeting of the Pennsylvana Federation of Historical Societies, a resolution was presented and adopted authorizing the appointment of a committee to cooperate with the Historical Commission and an Advisory Board consisting of leading historians and archaeologists to carry on the work. Excellent results were obtained in Eastern Pennsylvania under the untiring leadership of Miss Frances Dorrance, chairman of the committee.

The preliminary survey in Western Pennsylvania was made during April and May of this year, also under the direction of Miss Dorrance, by Mr. Donald Cadzow, a noted explorer and archaeologist. At a meeting in Pittsburgh with Mr. Stevenson and Mr. Potter of our parent society, Mr. Cadzow reported that he had found in the country south of Pittsburgh approximately fifty Indian sites which he classified as "river bottom", "river bench" and "high land sites", and recommended that immediate work be started before these sites were destroyed by industrial developments and amateurs incompetent to do the work methodically.

It was finally decided to request the Westmoreland and Fayette branch to undertake the initial work in Westmoreland and Fayette Counties. The executive committee after careful consideration gave its approval and hearty support but under the state regulations none of its appropriation could be used unless the results became the property of the State Museum at Harrisburg.

For many reasons it was desirable to retain the results of the work in Western Pennsylvania and it then became necessary for our branch society to finance and provide a suitable museum. We were very fortunate, indeed, in having available the old mill at West Overton and a portion of the main floor was assigned to the Archaeological work. The financial plan worked out required the branch society to provide 1/3 of the funds, the other 2/3 came as a gift from Miss Frick. Here I wish to say that the major portion which our society provided was subscribed at the solicitation of our efficient and untiring Secretary and Treasurer, Mr. Lynch.

Mr. Cadzow secured for us an experienced man from the University of Chicago, Mr. Robert M. Engberg, who arrived in Pittsburgh May 29, and began work the next day, assisted by Mr. George S. Fisher and Mr. Roy Morgan of Finleyville, Pa. The details of the work are given in Mr. Engberg's report which is very comprehensive and which is printed in the following pages.

Because of the very substantial evidences secured in this summer's work, it is probable that another season's work will reveal much of interest and value in connection with the prehistoric Indians. Investigation of their burial places offers the only solution of the many unanswered questions, and because of the desire to coordinate our work with that already done by Ohio and New York, our branch Society has decided to continue the work during the summer of 1930.

Archaeological Report

By Robert M. Engberg

This work, for a number of obvious reasons, should have been under way these many years, but inasmuch as it is not yet too late to do considerable re-claiming, and likewise, since the importance of such work is now thoroughly appreciated, the future need cause no worry. It will be understood, of course, that this report cannot be conclusive to any degree. There is much work yet to be done.

The territory and the prospects involved in the two counties were more than enough to occupy us for the three months. This territory includes about 2000 square miles of Southwestern Pennsylvania, and has considerable frontage on both the Monongahela and Youghiogheny Rivers and their tributaries. A glance at the map will, no doubt, place the geographical distribution of these rivers more thoroughly in mind (Plate I). The location of Sewickley, Jacob's, and Indian Creeks will also be noted.

The country in general is of hilly conformation, growing more so to the east on approaching the mountains. The main streams of course, have had a strenuous part in opposing the general rolling condition by providing broad flats on the quiet sides of the river bends. These stretches of even ground were often utilized by the Indians as camp sites, but, presumably due to the danger of attack from above, they established their main villages on the heights, or at least on land permitting of unobstructed vision and practical protection. This, however, must be strictly a presumption until the river sites have been investigated.

Reports on the entire district had been so optimistic and so replete with assurance of success, that we hardly knew where to turn our shovels first. It was decided, however, to try the Perryopolis section as a starter, and in so doing we met with immediate success.

We first investigated the Francis farm west of Perryopolis where we were shown the "Indian Picture Rock". (Plate II). A replica of this remarkably well preserved rock was made and is now in the museum at West Overton. Only a small amount of excavating was done here as we heard of a richer field at Fuller's Hill. Fuller's Hill, locat-

ed about a mile to the southwest of Perryopolis and one and a half miles from the Youghiogheny River, has already written a large chapter in the previously unwritten history of Western Pennsylvania. The short time allowed in any one place—the underlying purpose of the expedition being to make a survey of the two counties—drew us most unwillingly away from what is possibly one of the most interesting sites that yet remain open to investigation. Fuller's Hill has yielded a wealth of information but much remains to be disclosed. Again the fact must be stressed that this report can in no encompassing way give the story of the Red Man and his habits. It is true that much has been disclosed of a vital nature, but the complete picture must await further work. Such investigation will serve to add to, verify, or discount any theories formulated from the work of the first summer.

A mound, one of the few in the locality, next claimed our attention. It is located on the Sheppler Farm, three miles to the east of Belle Vernon. Here again, only a few days were afforded us, but we were able to ascertain that it had been a burial mound and that the pottery made by the builders was radically different from that found on any of the sites investigated during the summer. These departures from the norm, which for the time being must be a combination of the Fuller's Hill and Fullerton sites, are so marked as to place Sheppler's quite apart from the others. It has been noted that mounds in this locality are the exception, and wherever found are strongly indicative of affiliations with the Ohio country to the west. The one body found bore no artifacts with which to identify it. The pottery was grit tempered entirely, as opposed to the general shell temper ware of the other sites. Fuller's Hill did contribute some grit ware, but it was very uncommon, and was mixed with the ground shell before baking. It would seem then from the very presence of a mound in a "moundless" country—and of course its construction—and the striking difference in the pottery bond, that we are dealing with two separate peoples. The view that this grouping of two such seeming irrelevancies in one place could be but a local variant, is tenable but not probable. It was impossible to gain access to any of the other mounds, which leaves a large gap for future investigation. There are only

eight bona fide mounds in the two counties, according to Mr. Fisher.

The work in the eastern part of the two counties can be summarized quite briefly. The territory at one time no doubt abounded with Indians, but who were in the region only for fishing and hunting. This made them seasonal visitors only for the time necessary to satisfy their wants. The topography was not conducive to agriculture or travel; therefore, they made their homes in the larger valleys. Inherently nomads, they were more so when in the mountain areas. Having little refuse to cast aside, we were able to find only very little. They buried their dead, of course, as the gruesome duty became necessary, but did not concentrate them as they did in their home territory. By way of conclusion it may be said that the mountains of Westmoreland and Fayette Counties saw the Indian only a limited part of each year.

The Indian Creek experience was more than enough to send us back to the river valleys. In Lower Sewickley Creek and on the east side of the Youghiogheny in the Rilton and Shaner territory, were a number of fields known to have been the sites of rather permanent Indian camps. A five minute walk over the ploughed ground was time sufficient to gather many handfuls of the scrap material that serves to identify the Indian camp—the broken pot fragments, fresh water mussel shells, broken animal bones, and general miscellany. Accordingly we settled on the old Fullerton farm, after making a hurried investigation of one of the best sites in the Sewickley valley, the Procheck Farm. This latter is very promising, but for the present, at least, is not available because of objections on the part of the owner. It is hoped that this valuable site will at some time be opened up.

The Old Fullerton farm is about a mile east of the Youghiogheny river and Shaner Station, and lies just below the crest of a broad rolling hill. The camp site proper covers about 5 acres. A spring issues from the hill just below the camp on the North side. With the exception of the top knob of the hill, which lies about 300 feet to the Southwest of the camp, the site is surrounded by a descending slope which would have been of considerable advantage to an attacking party, which could also have been utilized

by the people of the Fullerton site in case of danger. The Fullerton site, as the others, has only been touched and thrusts a great responsibility on the future.

The recent season, despite the tenor of the previous observations, has not been without its conclusions however, and the finds have been surpassingly pleasing. In fact, with the working hypotheses secured this year, there seems to be no reason why another year or so should not do much to clarify many of the present mystifying problems. A larger personnel would hasten the solution.

In this region there seems to be a dominant hill top culture representing considerable resident duration. The thickness of "disturbed" ground, altho surely aided to a great degree by decayed vegetation, is mute evidence of much time spent on the sites. The general depth to "undisturbed" on Fuller's Hill is about 15", and on Fullerton's is never less than a foot. This condition is prevalent on all the hill sites investigated. Shells, pottery, animal bones, and charcoal were found at the very bottom of the disturbed.

There was assuredly an upper oxidized layer at the time the first Indians camped on these hills, but the tremendous amount of refuse scattered thru every cubic foot of the camps attests the fact that considerable time was spent in the laying of these thick sections.

Concerning duration of residency and lapse of time since the Indians bade farewell, it can only be said that not a single trace of European contact has been found. That alone places the peoples of our various sites within the far reaching pre-Columbian epoch,—just where is one of the problems.

Beside the hill top culture, there are the river sites and the mounds. The latter, even with the little work done, seem to be quite distinct from the other two. Practically nothing can be said concerning the bottom sites at this time. They may or may not be affiliated with the elevated camps.

It seems then, that the duty of this report is to go rather thoroughly into what we do know, namely Fuller's Hill and Fullerton's.

BURIALS

Fuller's Hill

Fuller's Hill first attained note as an Indian Camp when the limestone on the south side of the hill top was quarried. That was a number of years ago. Most of the local historians agree that seventeen bodies were unearthed, but this seems to be the only unified part of the recounting. And of course all the bodies and their associated artifacts have travelled their many ways and are no longer available. The quarry took out approximately one sixth of the 4 acre village site. It appears, however, that the majority of the bodies were probably buried on the east side of the hill top, for with a limited amount of digging we uncovered seven bodies on that site. One on the west side fills out the Fuller's Hill complement of eight. This village site has barely been scratched, for we took up not more than 300 square feet.

The eight burials consisted of five adults, one adolescent and two children. All of the bodies were flexed. The children and the young girl were covered with a flat slab of sandstone. One of the children had a necklace of copper and cowry shell beads about the neck in addition to a small pot placed at the mouth. Two of the adults were buried with pipes and another was distinguished by a great quantity of red iron oxide spread over the body. Another adult was buried with a pot in front of the face. Some of the bodies had been charred in spots, giving rise to speculation on burial ceremonies.

Burial No. 1 (Plate III). · Adult male, large supra, orbitals and mastoids, fair sized inion, long sacrum, large teeth and heavy boned. Legs closely flexed. Both arms stretched at length and between the legs. Right hand doubled under the wrist. Vertebral column much distorted. Distal end of the sacrum pointed toward the head, anterior side up. Right humerus away from the scapula.

Body lying on left side, looking west, in hole only large enough to acccommodate it. Body heading N55W. Bones in fair state of preservation. Lying in a heterogeneous mixture of clayey earth natural to the hill, impregnated with shell, sherds, charcoal, animal bone, and general camp refuse. Buried 32 inches deep. In the covering earth,

and in no conceivable relationship to the skeleton, were six bone beads and several broken ones, one notched edge shell, a broken awl 2 inches in length, a pierced fox tooth, and a crude discoidal of sandstone. This appears to be rather concentrated finding, but it is no different than any haphazard digging over the entire hill. A limestone pipe (Plate IX, Fig. 5) lay inverted directly in front of the mouth. It is 2 inches long and is 1¼ inches in diameter across the top of the bowl.

In the dirt above the body were also found skull fragments of a child—basal condylar section, squamus, 3 mongoloid incisors and portions of the associated maxilla, and other fragments.

There was undeniable evidence of a fire kindled over the body. Fine wood ashes in the region of the right scapula, right ribs, and cervicle vertebrae. Maxilla burned on the right side and on the zygomatic projection. Right posterior portion of the cranium burned, as well as the mandibular ascending ramus, right.

The inverted position of the sacrum is puzzling. Slight abnormalities are expected in a grave, but this peculiarity deserves attention. In keeping with this individuality is the position of the humerus at a distance from the scapula, and the distortion of the vertebral column.

Burial No. 2; (Plate III, Fig. 2). An aged female lying 22" from the surface. No supra-orbitals, small mastoids, no inion, moderately heavy boned, short sacrum, absorption of the mandible and maxilla in the region of the second and third molars, much wear of the teeth.

Body heading N30E, lying left side, facing N30W. Legs flexed; right foot superimposes the left; right arm between the legs; right hand at the knees; left hand on the right shoulder. Spine much distorted.

Of artifacts, there were several in direct relationship to the body. A piece of worked shell, about an inch long and pear shaped, was found between the hips. A shell pendant with the hole broken out was found at the head. This was also about an inch in length. A long, narrow, smoothly finished bone, 3 inches long, had been placed on the breast.

Two fine bone beads were found quite isolated in the dirt above the body, together with the usual camp refuse. Of particular interest was the quantity of large unworked snail shells grouped about the head and neck. They were in no order but were distinctly segregated. There is a possibility that the snail was regarded as a delicacy, or may have been held as such by the deceased. The placing of them at the head, in that case, would have much the same significance as the burial of a pot or pipe with the body.

That hole in which the body was placed was, as usual, just large enough to accommodate the huddled up body.

Burial No. 3; (Plates III and IV; Fig. 3). This burial was located 2½ feet from a stone fireplace (to be described later). An adolescent female of about eighteen years . . . no supra-orbitals, small mastoids, no inion, short sacrum. Epiphyses of the long bones, iliac crest and vertebrae not united and the third molars were just erupting. Teeth not much worn.

Legs flexed. Left hand under the skull; right hand back of the mandible on the left side. Body heading N45W and lying on the stomach. Both scapulae on top of the body. Facing N15W. Approximate height of this individual 5′ 3″. Lying in hole 15 inches from the surface.

A flat sandstone slab was found directly over the head. It measured 9 x 12″.

The right central incisor upper and the left lateral incisor lower were found above the abdominal region. They corresponded perfectly as regards roots, size and wear. All the other teeth were in place in the arch.

Several grains of charred corn and a charred cob were found in the lumbar region. Corn grains also found in the sacral and scapular regions. Heavy charcoal and several hundred wild cherry seeds were scattered generally over the entire body. No marks of fire on the remains however which were in excellent condition. One broad shanked arrow found in the dirt above the body.

Burial No. 4; (Plate III; Fig. 4) that of a child of about four years. A sandstone slab, 2′ 11″ x 2′ 4″ placed over the body. The crude arrow shape of the stone may have been of some significance. Lying N60W and looking

north. Arms and legs flexed. Buried 27 inches down. Bones in poor condition.

A small shell tempered pot found in front of, and close to the mouth. The opening of the pot was toward the feet. It is 2¼" high, and is 2" x 1⅝" through the main diameters of the top, the rim being oval. Three copper beads and several cowry shells were found at the neck and in the occipital region. They doubtless comprised a necklace. The cowry shells were rubbed through on the heavy end of the shell to allow for stringing.

Burial No. 5; also a child, but younger than No. 4, being about two years. This child was buried only 3½ feet from No. 4 and was covered with a sandstone slab, 2½ x 1¾'. It was buried 16 inches below the surface. Body heading east and facing south. Arms and legs flexed. Nothing buried with it. Undisturbed ground to the height of the usual undisturbed separated the two graves.

Burial No. 6 (Plate V; Fig. 1); an adolescent male of about twenty years. Large supra-orbitals and mastoids; noticeable inion; medium sacrum; massive bones, jaw and teeth. Teeth not much worn; epiphyses of long bones, vertebrae, sacrum and iliac crest not completely ossified.

The flexed body was heading N80E and was looking south. It was in a hole 36 inches deep. This was the greatest depth of any of the Fuller's Hill burials. The right arm was flexed with the hand in the mandibular cavity. The left hand was in front of the face. It lay on the left side. The vertebral column was much compressed with several out of place. The right patella was three inches below normal position.

A fine grained, red, iron oxide paint was scattered generally over the entire body, and in particular in the breast, parietal, occipital, and maxillary regions. The greatest quantity was found at the breast where the breast bone, ribs, and arm bones were stained a deep red. The skull was also stained, but not to the same degree. Some of the oxide had been scattered under the body. As if by signal it started to drizzle when the body had finally been uncovered, thereby imparting a vivid red to the heavily impregnated bone. We had indeed found a Red Man.

A long isosceles flint point, broken at the tip, was found on the ribs in the breast region pointing to the head. The point was quite obviously broken previous to the burial and could therefore not have been the death agent. Natural limestone was found in a wall at the feet. The stone was imbeded in undisturbed clay, indicating that the grave was dug out of the stone. Limestone is quite often inconsistent in its dissolution.

Burial No. 7; (Plate V; Fig. 2); Adult male; lying a few feet to the east of No. 1 and No. 2. Heavy supra-orbitals; massive jaw; large mastoids and inion. Teeth well worn; absorption in the molar region upper and lower. Approximate height of this individual 5' 7".

Body heading S30E and facing east. Lying on right side. Burial pit 30" deep.

There was much distortion due to settling. The mandible had fallen away from the normal position and the vertebra was disorganized. The left humerus was 6" out of place, superimposing its own radius and ulna. The left scapula, radius, and ulna, however, were properly spaced. The sternum was lying beside the proximal end of the left tibia. The spines were vertical in the thoracic region, twisting to the side through the lumbar section. The left hand was extended to the pelvic region, lying under the left pelvis. The right hand, also extended, was lying between the knees. The body was placed in the smallest hole possible. For this reason the feet appear quite abnormal, extending vertically.

An extensive, homogeneous sheet of carbonized material lay over the body and surrounded it on the sides. There was seemingly no texture to the residue which was 1/16 inch in thickness. It is quite possible that this covering was in the nature of a robe, being placed over the individual before the ceremonial fire was kindled. In keeping with this theory we found that the lower extremities of the individual had been burned to a slight degree. In fact, evidences of fire throughout the pit from the body to the surface were very striking. From our observations thus far, unworked snail shells appear to have some significance in connection with burials. With No. 7 were found a concentrated group in the pelvic region. These shells

are found over the entire camp, but there have been no such marked isolations as have occurred with No. 7 and No. 2. It will be recalled that they were found in abundance about the neck and the sternal area of No. 2.

A pot, shell tempered, cord marked, and with a slight flare in the neck, was lying about an inch from the face of No. 7. It lay on the side with the opening toward the feet of the individual. There was nothing remarkable inside the vessel.

Burial No. 8; (Plate V; Fig. 3); adult male; pronounced supra-orbitals; marked inion; medium mastoids; large teeth; short boned but massive; long sacrum. Teeth moderately worn; sutures all open.

Only 15 inches separated No. 7 and No. 8. An undisturbed clay rampart separated them, the top of which was 15 inches down, the depth of the undisturbed around the two graves.

The body was heading S 75 E and was facing north. It lay on the right side. Arms and legs were flexed, with both hands to the face. The body lay in a pit 23" deep. The approximate height of this individual was 5' 1". The right side of the mandible had been scorched. The fire which had been kindled over this body had evidently burned through to the side next to the ground. Several sections of the left side of the body had also been scorched. There was much ash and charcoal over the entire body to a considerable depth.

A slate pipe effigy of a crow (see Fig. 3) was lying with the beak vertical in front of the right hand which was placed immediately in front of the face. The pipe is 2¾ inches long, and the beak itself is ¾ inches. It is finely worked in its entirety with special emphasis having been placed on the beak, eyes, feet, and bowl. A couple of inches from the pipe was also found a 4 sided twinned quartz crystal shaped roughly like an arrow point. The crystal face is almost perfect.

Fullerton Farm

The part of the farm on which the village site is located was unfortunately in corn at the time of our investigation. The owner, however, very kindly gave us permission

to dig between the rows. This worked out nicely for a while, but later it became necessary to sacrifice some of the corn but suitable arrangements were made with the owner. It is to be hoped, however, that this field will at sometime be available for a thorough investigation.

We made a number of locations with the probes before digging. Soft spots and one rock were located. After the preliminary survey had been completed we uncovered the rock, lifted it, and found exposed in the cavity beneath, the bones of No. 11.

Burial No. 11; (Plate V; Fig. 4); a child, under one year. Body heading S15W. It lay on the right side, facing east. Arms and legs were flexed. The body had been squeezed into the hole. There was a raised portion of undisturbed clay at the head, forming a natural pillow. Nothing except body was found.

The stone is being preserved at West Overton, inasmuch as it is a typical grave stone. The cavity beneath the stone, however, is most unusual. On the under surface of the slab is delineated quite clearly the shape of the hole. It measures 20″ x 17″. The stone is 26″ x 18″. The main axis of the stone was NW-SE. The plough had just missed it as it was only 7 inches below the surface. The pit was 17 inches down. A broken pipe stem, probably dropped unintentionally, was found under the edge of the slab.

Burial No. 12; (Plate VI; Fig. 1); a child, under one year. In fact, only a few weeks at the most separated the ages of Nos. 11 and 12. No. 12 was slightly thinner boned, indicating that it may have been a female.

This body was lying to the east of No. 11 separated only by a 5 inch wall of undisturbed. The top of the wall was 13 inches below the surface. The body was flexed, arms and legs, was lying on the left side, and was facing No. 11, or west. It was heading S15W. It lay in a pit 16 inches deep.

At this juncture it was noticed that the undisturbed ground around the two graves rose abruptly, a couple of feet from the pits on the north, west, and south sides. In other words, the grave pits had been sunk in one large pit. On clearing a bit more, post holes were discovered ranging around the larger depression. On following this rise com-

pletely around, it was discovered that it was in the form of a circle. Post holes were spaced irregularly around the whole structure. The remaining ground within the pit contained burials 13 and 14.

Burial No. 13; (Plate VI; Fig. 2); a child, about two years old. Extended at full length. This is the only burial at full length encountered during the summer, and is the first in Mr. Fisher's experience in this part of the state. The child was 25 inches in height. Arms were straight to the pelvis.

The body was heading S60E, and the head faced the feet. It lay in a hole just large enough to hold it. The pit was 16 inches deep.

The extended position of the body is the more significant when we consider that it was found in the same large pit as three others which were flexed, and lay between them all. Each of the bodies was in a separate depression below the floor level of the large pit. Over the entire floor was a thick continuous layer of ash, charcoal, and the usual kitchen refuse, meaning that even had a ceremonial fire been burnt over the bodies, that alone could not account for the accumulated thickness. The presumption is that the children were buried in a tepee floor, habitation continuing after the burials. (See Tepees and Fire Pits—Fullerton Farm, for further comment.)

It is difficult to tell the sex of a child from the skeleton, but if such adornment as a shell necklace, and cowry shell hair and wrist beads are any indication, the child was probably a girl. Seven shell beads were found about the neck. Of the cowry shell beads, thirty-one were found scattered over and about the head, twenty-four were around the left wrist, and twenty-nine were around the right wrist. A small round section of the head of the shell had in every instance been rubbed off to allow for stringing. A bone bead was found along the lateral side of the left tibia. A few grains of charred corn were in the refuse above the body.

Burial No. 14; (Plate VI; Fig. 3); a girl of about ten years. (In an individual depression below the larger pit floor.) No supra-orbitals, no inion, short sacrum, thin boned, small mastoids, epiphyses not ossified, even of the

calcaneus, phalanges, and sacrum; second molars just beginning to break through. Approximate height of the child 4′ 5″.

Body heading S15E and facing northwest. It lay on the left side. Arms and legs were flexed. The pit descended 6 inches below the level of the tepee site. The top of the skull was just one inch below the floor.

The shoulder blades were in the same horizontal plane at the time of exposure. At burial, however, the right shoulder had been slightly elevated from the bottom of the hole. With decomposition the right scapula had broken away from the rest of the body, carrying the humerus with it. The proximal epiphyses of the humerus and the right radius and ulna remained near their former position. The head and lower jaw likewise were once in a position more conducive to comfort, but the disintegrating process is no respector of persons, also causing the skull and mandible to fall away from each other.

One shell bead and one of bone were found around the neck, a strange necklace that has only two units. A large isosceles arrow point, directed toward the feet, was found at the breast.

Burial No. 15: a child less than a year old. Lying on the right side with arms and legs flexed. Heading S25E and facing northeast. Body lying in a pit 18 inches deep. A shallow fire pit two feet to the north may have had some connection with the burial. It contained almost pure ash and charcoal.

About the child's neck were 15 drilled cow elk teeth and two small mussel shell beads. They were arranged in a circle with the holes facing each other, just as the string hung. Some of the beads had been scratched in an apparent effort at decoration. Two others had first been drilled through the root, and then cut through the same end along the wide axis at right angles to the bore. This was a development beyond the simple drilled tooth and is indicative of an extension of artistic endeavor.

This burial was about 125 feet to the east of the group burial (No. 11, 12, 13, 14).

Burial No. 16: a girl of about 10 years. Epiphyses of the long bones, phalanges, pelvis, sacrum, and vertebrae

not ossified. Had a malformed jaw, with irregular eruption of the upper tooth row (Plate IV), but from the eruption of the molars, upper and lower, it was agreed that the child was of the age stated or thereabouts.

Heading S45E. Facing upward at the time of unearthing, but this was due to the backward settling of the skull. It was facing north at the time of burial. The movement of the skull and mandible away from each other had attached a carefree and laughing expression to this individual. This was the deepest burial found at Fullerton's, being 28". The height of this child was approximately 3' 10".

There had been considerable movement in the grave due to settling of the loose earth above the body after decomposition. The following data gives the degree of displacement. The distal end of right femur was 8 inches away from proximal end of the right tibia. The distal epiphysis right tibia and the right foot were normal with respect to the right femur, but the right tibia and fibula were 8 inches away from the normal union with the right femur. The distal ends of the right tibia and fibula were spread 3½ inches. The distal epiphysis of the left femur 2 inches away from the normal position with the femur. The proximal epiphysis of the right femur was 3 inches toward the distal ends. In fact, the epiphyses of the long bones in general were scattered. The three lower ribs on the right side were 4 inches out of place, toward the base of the spinal column. The left foot was opposed to the normal position. It was probably squeezed into the hole and subsequently dropped to the position it was in when found.

A shell disc and a mussel shell bead were found in the region of the neck. They may have constituted a necklace, but considering that there were only two, it is possible that they were used as hair rings. The disc was the only one found on the Fullerton site. It was ⅜ of an inch in diameter.

This skull displays the only case of occipital flattening found on any of the skulls. It probably happened accidently from continual pressure of the cradle board during infancy.

The face, occiput, long bones, and phalanges were scorched to quite a degree. We thus have the same ceremonial customs indicated for both Fuller's Hill and Fullerton's. Thick ash and charcoal lay directly over the body, together with the typical refuse. Above this first thickness of five inches was a layer of semi-pure yellow clay, and above this was refuse again to the surface.

Reconstructing the picture, we can see the body shoved down into the pit which was barely large enough to hold it. In so doing the left foot was brought to its abnormal position preparatory for the backward drop. The unusual conditions of this burial also paved the way for the complete disarrangement of the right foot and the other eccentricities previously described. The size of the hole also prescribed that the head be bent upward. The telescoping of the skull at the coronal suture caused the queer position of the head at the time of uncovering. After the body had been placed, a fire was kindled. Suitable ceremonies were more than likely on the program. After the rites had been consummated, the yellow clay that had been dug out in making the pit was thrown back over the ashes. The remainder of the hole was then filled with what was left over. This reconstruction is not far amiss.

Burial No. 17: a child that apparently died soon after birth. Arms and legs flexed. Heading north and facing east. Approximate height 12".

Buried on the inside edge of a tepee site, 6 inches from the floor and 9 inches from the surface. The body was buried within a layer of white ash—that is, was completely immersed in it. The entire tepee site was composed of ash and charcoal in superimposed strata, but this particular stratum was 6 inches thick. The supposition is that a small hole was dug in the tepee floor and the body covered with the same ash that came out of the hole. The bones bore no sign of incineration. There were no artifacts of any sort with the body.

Method of Locating Burials

It may be of some interest to know the method of locating the burials. It simply utilizes the well known principle of physics that the force required to move an ob-

ject is as the resistance. But be that as it may, we used a sharpened steel probe with a piece of brass piping welded at right angles to the top to serve as a grip (Fig. 4; Plate VI). After very little experience it could easily be told when the probe was on the general level of "hard pan", or when it was sinking into a pit. In the nature of things, the "fills" carried less resistance than ground never disturbed. Of course, all the "fills" were not burials. Some were fire and refuse pits, while others were tepee sites. But usually there was something to reward the locating of a deep plunge. It is true that there were variations even on one site, but close attention to the frequent test pits gave the general level of hard pan. Then too, the probe at times hit upon a slab which in turn uncovered a soft spot containing a grave.

This method would be of great assistance to a larger group, but it was indispensible to us. Without it, it is doubtful whether we would have had equal success. It is understood, of course, that the site must first be located. Typical surface finds such as mussell shells, pot sherds, animal bone, flints, hammer stones, and so on are the indication. A few test pits soon verify.

CRANIAL COMPARISONS

Number		Cephalic Index bx100 length	Length l	Breadth b	Height h	Height-Bregma
No. 1	Fuller's	-	-	-	-	-
No. 2	"	82.29	6.56"	5.4"	5.18"	5.44"
No. 3	"	86.40	6.18"	5.34"	5.20"	5.156"
No. 7	"	85.103	7.156"	6.09"	5.66"	5.66"
No. 8	"	82.38	6.78"	5.56" (est.)	5.48" (est.)	5.48" (est.)
No. 14	Fullerton	78.24	6.39"	5.0"	5.125"	5.09"
No. 16	"	98.97	5.9"	5.84"	5.156"	5.156"

FACIAL COMPARISONS:

Number		Total length of face (a)	Upper Length (b)	Breadth (c)	Facial Index ax100 c	Facial index upper bx100 c
No. 1	Fuller's	-	-	-	-	-
No. 2	"	4.406"	2.75"	5.125"	86.01	53.6
No. 3	"	4.24"	2.66"	4.75"	89.2	54.7
No. 7	"	5.09"	3.25"	5.844"	87.1	55.7
No. 8	"	4.814"	2.826"	5.188"	92.85	55.0
No. 14	Fullerton	3.828"	2.28"	4.25"	90.7	53.6
No. 16	"	3.844"	2.188"	4.42"	87.1	49.6

Compensation was made in the total facial lengths of No. 1, 2, 7 and 8 where there was wear of the teeth.

BURIAL CEREMONIES

Fuller's Hill and Fullerton Farm

It has been noted that a number of the bodies bore signs of fire. The suggestion has been made that the subjects were the victims of a fire stake rite, and were subsequently placed in the pits awaiting them. When reviewing the facts of the case, however, this hypothesis becomes untenable and can be immediately discarded, as can any having to do with burning during life. The bodies if burnt at all, with two exceptions, were so only on the upper side, that is,the side exposed to view on uncovering. Burials 8 and 16 were slightly burnt on the under sides, but much more so on the upper surfaces. The bodies were not uniformly more intensely burnt on the legs, as would happen during a stake ceremony. Concentrated ash and charcoal superimposed the bodies in every case, even those not showing signs of incineration. And finally, articles of certain regard to the individual during life, or of import to his future well being—the pot with No. 7, the pot and necklace with No. 4, the shell medallion with No. 2, the effigy pipe and quartz crystal with No. 8, and the paint with No. 6, etc., would strongly indicate a ceremonial burial with fire rites, but certainly not at the stake.

It seems manifest that the bodies were placed in the pits in practically the only position possible (flexed in all cases but one) considering the size of the hole. Ceremonies were probably held over the open grave, after which the fire was kindled. This was not of long duration for the fatty parts of the body were never entirely burnt away —the evidence remains only on members covered by little flesh—as the face, head, hands, and feet. The grave was then covered with the dirt that had previously been dug out.

The same rites attendant upon those bodies showing signs of fire, were also probably bestowed on the individuals retaining no actual proof on the bones themselves. The universal finding of large quantities of stratified ash and charcoal over the bodies seems to be a rather vital indication.

One group burial of four was found on the Fullerton site, containing burials 11, 12, 13, and 14. Strangely

enough these bodies were within a tepee depression, in separate pits below the floor level. Above these and on the floor was a thick continuous layer of ash, charcoal, and kitchen refuse, denoting that even had a ceremonial fire or fires been kindled, they alone could not account for the accumulated thickness above the bodies. It seems that the various economies of household life were carried on in concentration over the small cemetery. This, surprising and revolutionary as it may seem, is not a new discovery, for the same practice has been noted elsewhere. The supposition is that this was a family burying ground. It is true that only children were found, but it is possible that they died before the adults occupying the same tepee, leaving no room for additional bodies, which are probably elsewhere on the site. The fact that one of the burials, No. 13, was not in the usual flexed position but was extended, and was accompanied by an abundance of adornment, need not necessarily throw this infant out of the family. The position is a distinct departure from local custom, but the fact is before us that all four were buried within a short span of time. They were all in pits descending from the same floor level, and the superimposed layer of ash and refuse was uninterruptedly stratified. It would be possible to introduce social and cultural differences as a cause of the anomaly, but it would be a difficult matter to bring two distinct times into the picture. There must be a number of explanations to fit logically with the known facts. Such exceptions are known from archaeological investigations in other parts of the country, happening even more frequently than our present ratio of one to seven at Fullerton's. The investigation of this site, however, has hardly approached a beginning, and does not warrant a too strenuous use of figures.

The flexed position, practiced in all cases but one (No. 13), appears to have become innate as the result of long continued attempts at labor economy. The fact that burial No. 13 was buried in the extended position, while the other three around it were flexed, and knowing that all were interred at about the same time, would indicate that the various procedures were regulated by custom.

The tenancy on Fuller's Hill seems to have been of protracted duration, if the many human bone fragments and teeth scattered throughout the site are a criterion.

The implication seems to be that these fragments represent a very early people, possibly different from those we know, and that our skeletal finds succeeded them after a considerable lapse, or that the fragments are of the same people forgotten by the grave diggers of our burials. At any rate many burials had been dug up in the history of the hill. Ploughing may explain some of the scattering, but enough fragments were found below plough level to dismiss the plough as a primary factor.

It is frequently related that the Indians—no attempt being made to differentiate—buried their dead at some constant depth and planned their burials so that the dead faced the rising sun. Merely to illustrate that this is not true of the Youghiogheny Valley, and that furthermore there was no ordained orientation or depth, the following table is given.

Number		Direction of axis through the head	Facing	Depth
No. 1	Fuller's Hill	N55W	West	32 inches
No. 2	"	N30E	N30W	22 "
No. 3	"	N45W	N15W	15 "
No. 4	"	N60W	North	27 "
No. 5	"	N75E	South	16 "
No. 6	"	N80E	South	36 "
No. 7	"	S30E	East	30 "
No. 8	"	S75E	N5E	23 "
No. 9	Sheppler Hill	Southeast	Southwest	11 inches but probably about 5 feet before the mound was washed down.
No. 10	Stahlstown	North	East	42 inches
No. 11	Fullerton's	S15W	East	17 "
No. 12	"	S15W	East	16 "
No. 13	"	S60E	N60W	16 "
No. 14	"	S15E	Northwest	18 "
No. 15	"	S25E	Northeast	18 "
No. 16	"	S45E	North	28 "
No. 17	"	North	East	9 "

The following table will prove useful in a further study of the burial customs. It will be remembered that ash and charcoal in very undiluted form covered all of the bodies, and that all but No. 13 were flexed.

Fuller's Hill

Number	Age and sex	Side exposed on uncovering.	Members burnt.	Associated artifacts.
1	Adult male	Right	Right maxilla, zygoma, occiput, ascending ramus.	Limestone pipe.
2	Adult female		Not burnt	Shell medallion
3	Female, 20 yrs.		Not burnt	Sandstone slab over head.
4	Child, 4 yrs.		Not burnt	S. S. slab over head; copper and cowry bead necklace; small pot.
5	Child, 2 yrs.		Not burnt	S. S. Slab over head.
6	Male, 20 yrs.	Right	Burnt generally.	Red oxide paint.
7	Adult male	Left	Bones of left foot and distal end left tibia.	Pot.
8	Adult male	Left	Left mandible with much less on right side.	Effigy pipe and twinned quartz crystal.

Fullerton Farm

Group	Burial			
	11	Under 1 yr.	Not burnt.	S. S. Slab over head
	12	Under 1 yr.	Not burnt.	None.
	13	Child, 2 yrs.	Not burnt.	Mussel shell bead necklace; cowry shell hair beads and bracelets.
	14	Female, 10 yr	Not burnt.	Mussel shell bead and bone bead at neck
	15	Under 1 yr.	Not burnt.	Elk tooth and shell bead necklace.
	16	Female 10 yrs. Left Face up	Face, long bones, and phalanges on upper side; occiput.	Mussel shell bead and shell disc on neck.
	17	Few weeks old.	Not burnt.	None.

FIRE PITS AND STONE FIRE PLACE

Fuller's Hill

Fire pits were abundant, being found over the entire hill, even among the seven graves on the east side. They were usually round, as opposed to the oval grave pits, were about 2½—3 feet in diameter, and descended from two to three feet. Some seemed to have been used primarily for mussel baking, for in these were found hundreds of burned shells. The hinges on many had never been broken. Others were depositories for fish and animal bones in great concentration. Heavy ash and charcoal permeated the pits throughout and much broken pottery was in evidence everywhere. It was seldom that any two pieces of the same workmanship could be pieced together. It was evident that the other pot fragments had gone to make up the ever increasing disturbed depth of the hill top.

The pits were undoubtedly used for cooking, as attested by the great percentages of ash and charcoal, but were also used as receptacles for the waste products of the Indian board. The occasional beads, awls and other products of their artcraft which were found in the pits, may have been discarded, but it is more probable that they were lost in the general and copious debris about the pits and were swept in. These articles were also found outside the pits, some unbroken and retaining yet the final touches of workmanship imparted by the workers.

On the west side of the hill, only a few feet north of burial No. 3, was located a stone fireplace. (Fig. 3; Plate III). It was composed of a number of concentric rows of limestone rock gradually ascending to the periphery. It measured 3′ x 5½′, was 14 inches deep at the center, and was 8 inches below the surface on the outside. The actual depth of the structure then was 6 inches. The center contained the heaviest ash, it being alternately red and gray. In this were imbedded shells in an extreme state of carbonization. Above the ash and over the entire fire place was a great quantity of charcoal, some pieces being as long as 12 inches. In the upper 6 inches were found a number of elk teeth, bone beads, and several awls. The presumption is that after the fire place had become useless as such through the filling up process, it became, as any other part of the hill, suitable for a homesite. One is led to this belief by the number of fine beads and awls found here in greater concentration than in other parts of the hill. It seems logical to assume that the articles of greater regard—judged so by their general scarcity—would be lost in the numbers indicated only in the home and not at some charmed spot outside. With regard to the shape of this abode, if indeed it was one at all, nothing can be said. There were no post holes to act as guides, leaving only assumption to substitute for fact. The center of the hill top, which we barely touched, will probably yield information concerning habitations.

FIRE PITS AND TEPEE SITES

Fullerton Farm

The field is quite generally indented with a great number of depressions—unseen of course from the surface, but disclosed by reliable probe. Some of these had attained to some size and were undoubtedly tepee sites. These were either round or oval, with the possibility of an offshoot to accommodate a fire place. These larger indentations were usually accompanied by post holes ranging around the periphery, which were the label of the tepee. The floors were uniformly flat, curving abruptly into the rise to the "hard pan" level. This latter which is the level below which there has been no disturbance, is covered over the entire field by about a foot of oxidized and carbonized vegetable matter, together with a great preponderance of Indian waste material—ash, charcoal, potsherds, animal bones, fish scales, shells, etc.; that is, in all places but the tepee and pit depressions which descend to varying lower depths.

The pits and tepees are all characterized by an abundance of refuse and thick layers of concentrated ash and charcoal. Some will, for instance, be more greatly blessed with the lost articles which are the peculiar reward of the archaeologist. It has been only through carelessness on the part of the former inhabitants that we are fortunate enough to know that they made many and varied types of bone awls.

These are found scattered throughout the debris of tepees and pits, together with other welcome finds,—the pipes and stems, fish hooks, beads, arrow points, and so on. It is quite clear that the Indian squaw had not the inclination to clean the floor, to which attribute we are truly grateful. Had the Indians not been thus constituted, we could not find the superb pieces of workmanship lying intact as the day they were made. These people quite evidently made no pretense at order or cleanliness, at least in the interests of the floor. Added to the better pieces were the broken pots, the cleaned meat bones, the discarded shells, and the fire remains. All were as a matter of habit left on the floor where they were dropped, and treaded into distinct strata to remain for our investigation.

The Fullerton tepee sites were all dug out before occupancy, the depths varying from 1½'—2'. Assuming the sides of the structures to have been held tightly down by pegs and stakes, there could have been no advantage with regard to wind, rain and snow, in sinking the floors. These elements with any constant topography outside would strike and enter the tepees with the same force and concentration, no matter whether the floor at ground level were flat or depressed. There would, however, be a distinct benefit from two other important considerations, namely,—heat and head room at the sides of the conical structure, which would be greatly modified by any increase in the depth of the floor. Of course, the assumption that the sides of the tepee covering were always in contact with the ground is without a great deal of basis. Most of the time the covering was probably sufficient to keep out the snow and rain, but the wind probably had continual access. With such a condition the value of a sunken floor is readily seen.

Post holes ranging around the depressions were discernable in most cases, extending into the "undisturbed." In some cases, however, these were not evident because the stakes had not descended into the undisturbed, but that they were once there is not doubted because of the great similarity in other respects. Earth movements, such as the planting or uprooting of a stake in the disturbed area, were usually undiscernable.

One tepee depression (Plate VII), which was 6' x 8', had a series of 17 post holes surrounding it. The holes in all cases tapered to a point and at their greatest extension were about 20 inches below the surface. The floor itself was about 23 inches deep. This tepee had 16 more tapering post holes scattered, with no regularity over the entire floor. The significance cannot be stated categorically at present, but it is possible that they were used—2 or 3 at a time—as supports for a vessel or roast. They extended about 5 inches below the floor level.

Another of the tepee locations was pitted below the floor level. It was here that burials No. 11, 12, 13, 14 were found (see Burial Ceremonies), each in an individual oval pit. Nine tepees were uncovered in all. They

were usually 8'-10' in diameter and were sunk from 1½'-2' below the surface.

The fires would obviously be in progress in only one section of the tepee at a time, yet our evidence shows heavy fire beds over the entire floor in most cases. The cooking department was evidently transferred many times. One tepee when uncovered presented the sad spectacle of a mass of charred corn husks and cobs. It has already been made clear that the floor was continually built up by the addition of rubbish.

POTTERY

Fuller's Hill

The following data and descriptions were obtained from the rims alone, which included all of the sherd types.

The predominant pottery type was cord marked (Plate VIII), with the cordings varying from the heavily indented to the lightly impressed, and in design from the oblique, the horizontal, the vertical, or the cross-hatched. About half of the rims were scratched, serrated, or corded, while the other half were finished smooth.

Approximately half of the rims indicated a pot with a straight neck. These were usually lightly corded with a smooth or lightly corded rim, and are best exemplified by figures 4, 15, 17, 22 and 24. Number 20 had no decoration whatever. The diameter of the average straight neck bowl would have been between 8 and 10 inches.

The curved neck rims were more ornate, usually being deeply corded and having heavily incised rims as in figures 1, 2, 6, 13, 14. To find little or no decoration on the necked pots was the exception. The mid-section diameter of these would have ranged from 5-15 inches.

No handles or grips were found on any of the sherds, but several pieces were found with a hole pierced just below the rim. (Figures 3 and 7). There was probably a hole on the opposite side to provide for carrying. A leather thong could have been used.

Shell tempering predominated, only a few instances of grit mixed with shell being found. The colors were very somber, being dull black, gray, reddish brown, or yellow, or gradations of these. Only a few instances of red

on black, inside and out, were found. The size of the pot governed the thickness. No sherds were much more than ¼ inch thick.

The pot found with burial No. 7 (Plate VIII; Fig. 3); measured 4½ inches across the top, 3⅞ inches through the bulge of the bowl which was below the middle, and was 4½ inches high. It was shell tempered and varied in color from a dull gray to a reddish brown. The bottom was not flat enough to allow the pot to stand without support. When used it was probably placed right upon the fire and supported by the coals.

The pot with burial No. 4 seems to have been the work of a child (Fig. 2). It was 2 inches high and was 1⅝ x 2 inches along the main diameters of the top. There was no attempt at decoration, and the rim was very thin and quite symetrical. It was shell tempered.

Another pot which also seems to have been a child's play is shown in (Fig. 1). It was very simply made of shell tempered clay. It was ¾" in diameter across the top and was also ¾" high.

Although pipes and pipe fragments made of various rocks predominated on Fuller's Hill, some were found of clay, without tempering. The color was usually a light brown. The pipe represented in Plate XI, Fig. 1, is a single unit, the only one found. The bowl was symmetrically dotted in a rather neat pattern. The stem had no decoration. Fig. 2 represents a cylindrical bowl with parallel circular dottings on the upper two-thirds, and parallel oblique dottings on the lower one-third. The stem intended for this pipe was other than clay, as indicated by the small neatly finished stem opening. Fig. 6 and 7 are of pipe bowl fragments, very simple in design. Fig. 8, 9, 10 and 11, are of pipe stems which were made of the same untempered material. They bore no decoration.

Many pieces of puddled clay, ready for the moulder's art, were found throughout the digging. The Fuller's Hill people also made balls and marbles, the former usually being about 2 inches in diameter. No tempering was used in these.

Fullerton Farm

The following data was also obtained from the rims. About one-fifth of those found indicated a straight neck, no flange pot. These were all corded with the lips plain in all but two cases. One of these was roughly scratched, and the other was carefully notched (Fig. 10). Also see Plate X; Figs. 5, 6, 7, 8 and 10.

About two-fifths of the rims were from moderately curved pots. Of these, one-fifth had a perfectly plain lip. The rest were decorated, some to a high degree, including cording, incising, and scratching, but mostly cording. Figs. 3, 4, 9, 12, 14, 16, 17 and 18 serve to illustrate this group.

The highly curved pots made up another two-fifths of the Fullerton pottery. All were decorated in some manner (Figs. 1, 2, 11, 13 and 15). There was a distinct tendency toward the ornate in the rim finishing of the more highly curved pots. One quill marked rim of this type was noted.

All types appeared to range in diameter from 5—20 inches. There was little plain finish, most of it being corded. All were shell tempered. The average thickness of the pottery was ¼ inch, but instances of sherds ¾ inch in thickness were found. The colors were about the same as those at Fuller's Hill—dull grays, blacks, yellows, and reddish browns. No red on black was observed.

One broken shell tempered pipe was found. It was finely incised around the bowl rim, but was otherwise quite plain.

A few clay balls and one broken perforated clay discoidal were found. The balls were about an inch in diameter. The discoidal was 1¼ inches in diameter and was ¼ inch in thickness.

A piece of shallow bowl with an approximate diameter of 12 inches was also found. It was saucer shaped with no departure from the constant basal curve. It was cord marked parallel to the rim, but with no decoration on the lip. It would have stood about 2 inches high.

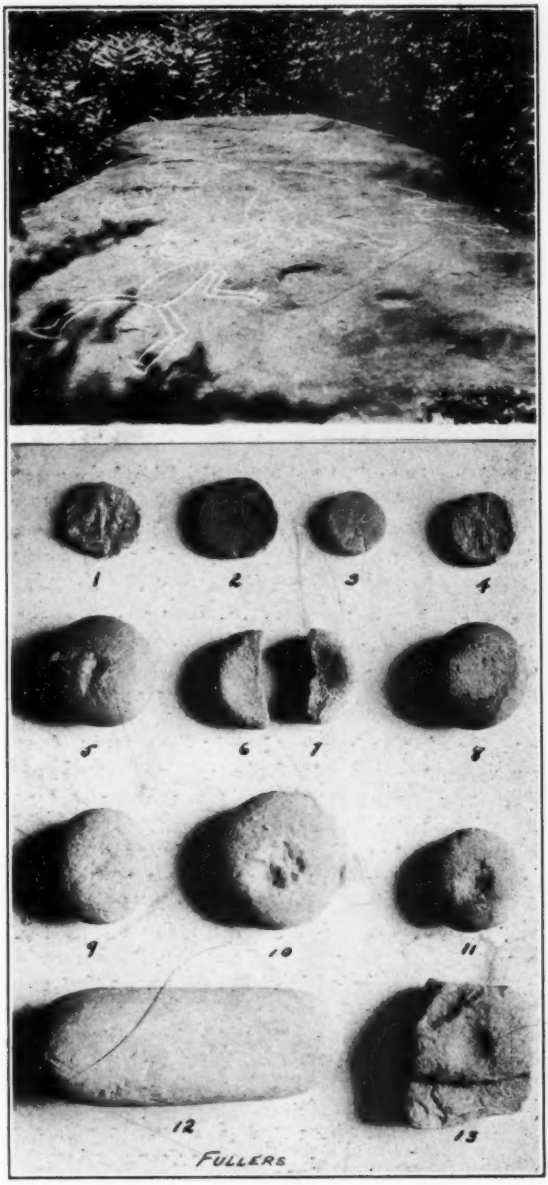


PLATE II

INDIAN PICTURE ROCK
STONE WORK - FULLER'S HILL

Discoidals	1-4
Hammer Stones	5, 6, 7, 9, 10, 11
Rubbing Stone	8
Pestle	12
"Cup Stone"	13

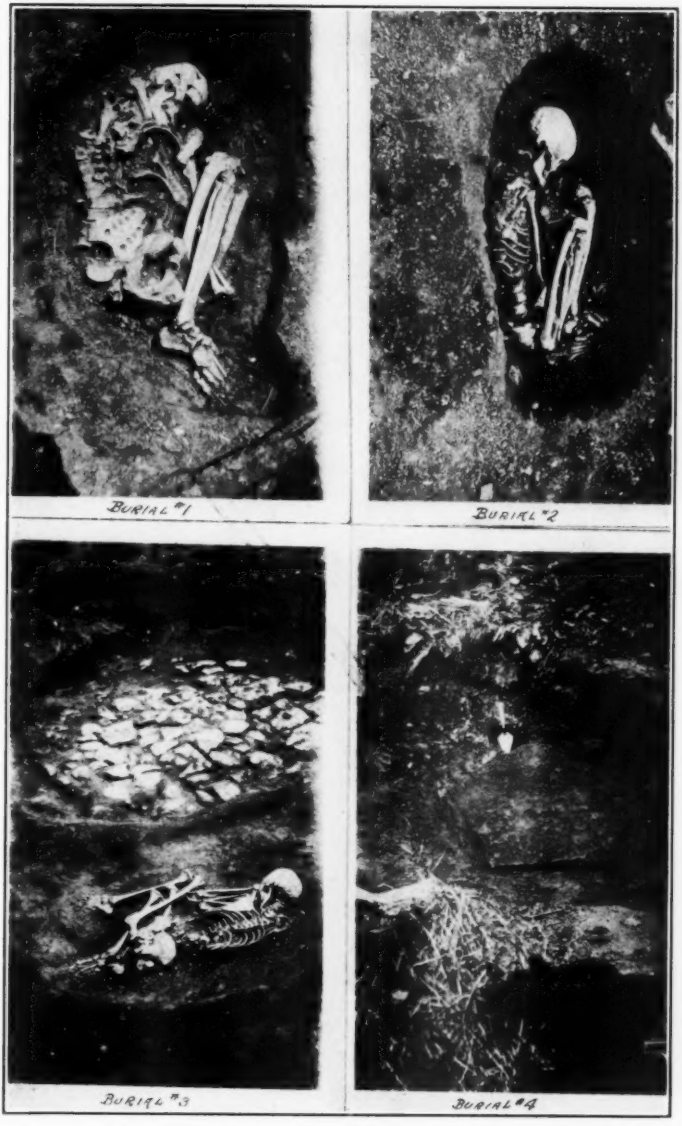


PLATE III

FULLER'S BURIALS

No. 1 - Fig. 1 No. 2 - Fig.2 No. 3 - Fig. 3 No. 4 - Fig. 4

Fuller's Burial 3

Fullerton Burial 16

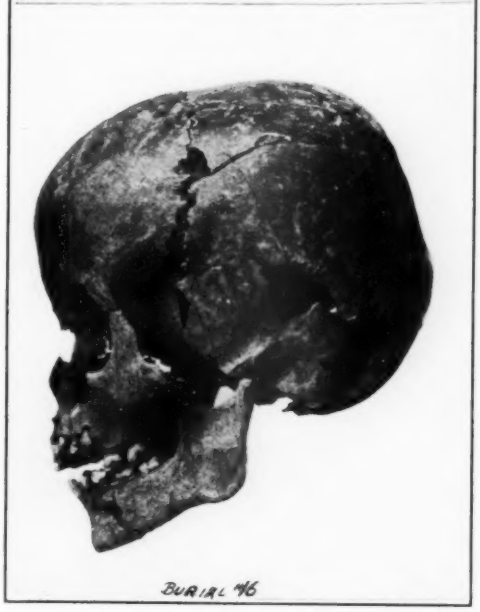


PLATE IV

PLATE V

FULLER'S BURIAL

No. 6 - Fig. 1 No. 7 - Fig. 2 No. 8 - Fig. 3

FULLERTON BURIAL

No. 11 - Fig. 4

PLATE VI

FULLERTON BURIALS

No. 12 - Fig. 1 No. 13 - Fig. 2 No. 14 - Fig. 3

FISHER LOCATING - Fig. 4

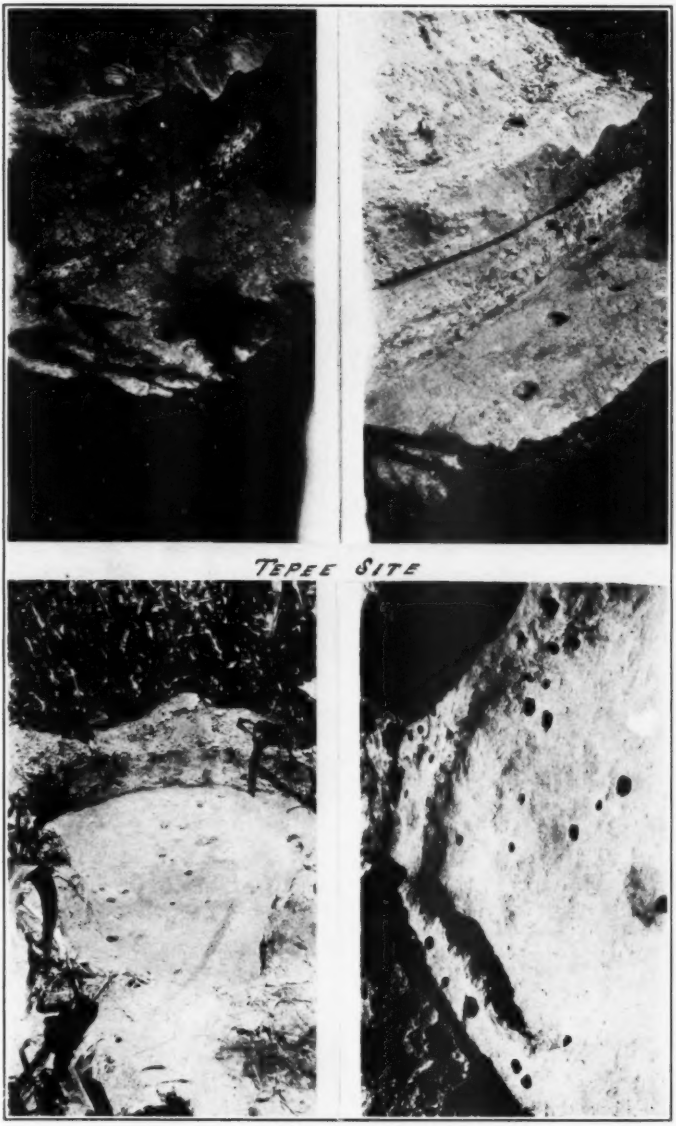


PLATE VII

VIEWS OF A TEPEE SITE — FULLERTON

FULLER'S HILL

Shell Tempered Pottery 1-2-3

Turtle Shell Cups 4-5

POT RIM TYPES
FULLER'S HILL

Moderately Straight Neck
4-5-7-9-10-11-12-15-16-17
18-19-20-21-22-23-24

Flanged Neck
1-2-3-6-8-13-14-25

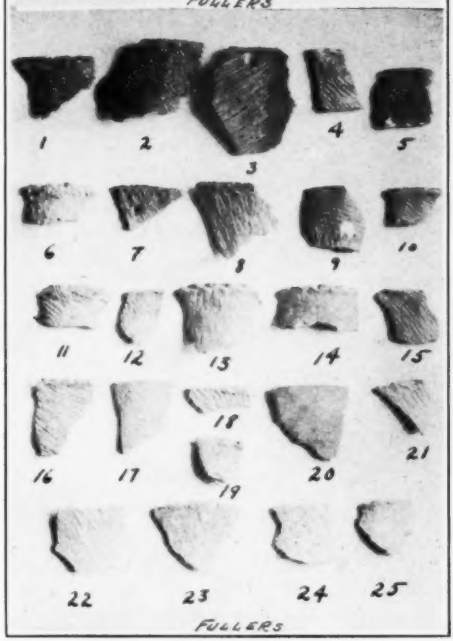


PLATE VIII

ARROW HEADS

(a) Shanked Type 1
Serrated Isosceles 2

(b) Shaly Limestone Points

(c) & (d) Common Isosceles Type

(e) Point Variants - Not Predominant.

PIPES and PIPE STEMS
FULLER'S HILL

Pipes and Pipe Fragments 1- 7

Pipe Stem Fragments 8-11

PLATE IX

POT TYPES

FULLERTON FARM

Straight Neck-No Flange

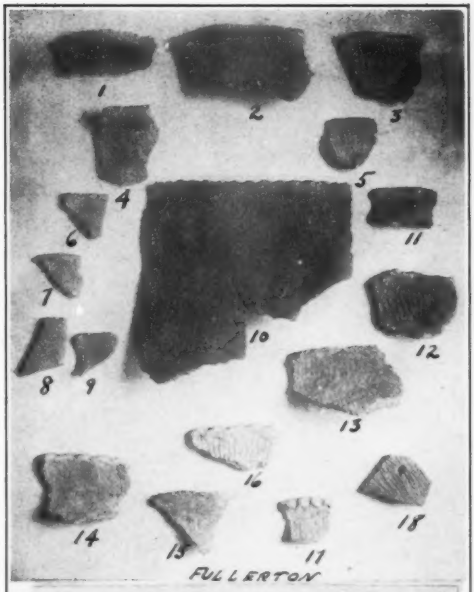
5, 6, 7, 8, 10

Mederately Curved Necks

3, 4, 9, 12, 14, 16, 17, 18

Highly Curved Necks

1, 2, 11, 13, 15



FULLERTON FARM

1-Charred Corn & Corn Cob

2-Charred Cob and Husk

3-Diorite Celt

4-Pipe Fragment

5-Unbored Pipe Stem

6-Pipe Stem

PLATE X

BONE WORK-FULLER'S HILL

Problematical Pieces	1, 3, 7, 8, 9, 12
Notched Deer Mandible (Lower Jaw)	2
Blunt Arrow Point of Antler	4
Feather Separator of Antler	5-6
Notched Turtle Shell	10
Needle Fragment	11
Awls	13-24

BONE WORK
FULLERTON FARM

Antler Tip Arrow Point	1
Used Animal Rib	2
Feather Separator	3
Awl Types	4-19
Chisels (Scalpels)	20-21

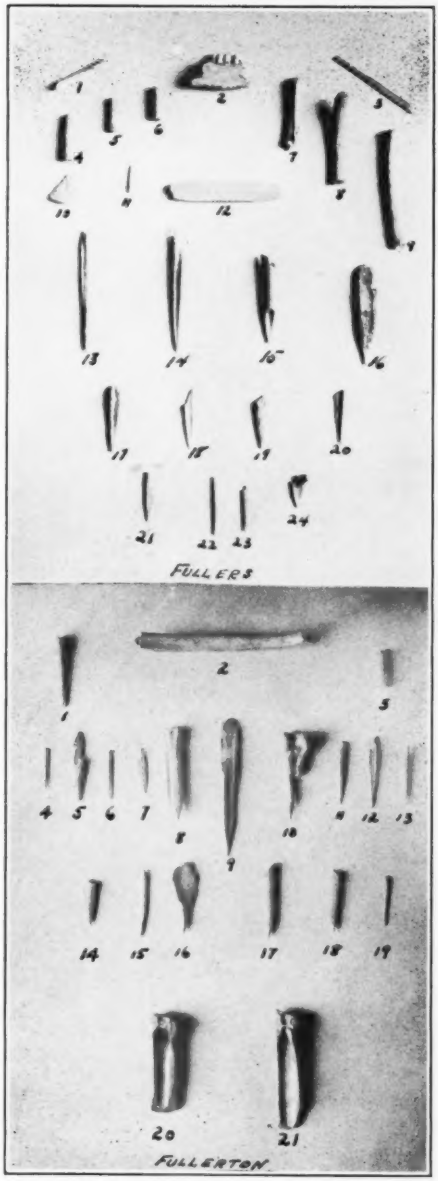


PLATE XI

FULLERTON FARM

Bracelets of Cowry Shell Found with Burial 13 1-2

Necklace of Mussel Shell Beads with Burial 13 3

Cowry Shell Hair Beads with Burial 13 5

Elk Tooth and Mussel Bead Necklace Found with Burial 15 4

SHELL WORK

Buttons 1

Problematical Piece 2

Broken Shell Pendant with Burial 2 3

Worked Shell Found with Burial 2 4

Serrated Mussel Shells 5-6

Shell Disc and Mussel Shell Bead with Burial 16 7

Decorated Spoon Fragment 8

Entire Shell used as Bead 9

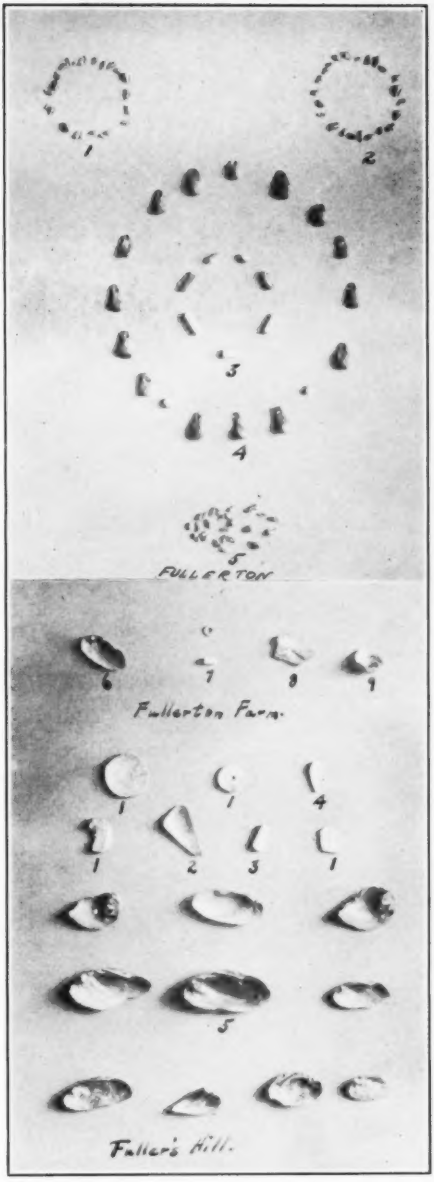


PLATE XII

BEADS - FULLER'S HILL

Common Bone Variety 1
Bead Stock 2
Bear Toes 3
Elk Teeth 4
Fox Tooth 5
Animal Shoulder Blade 6
Copper 7
Cowry Shell 8
Flat Bone 9
Slate 10

BEAD TYPES
FULLERTON FARM

Common Bone Cylinder 1
Animal Toe Bones 2
Small Animal's Upper Fore Leg 3
Bear Tusks 4

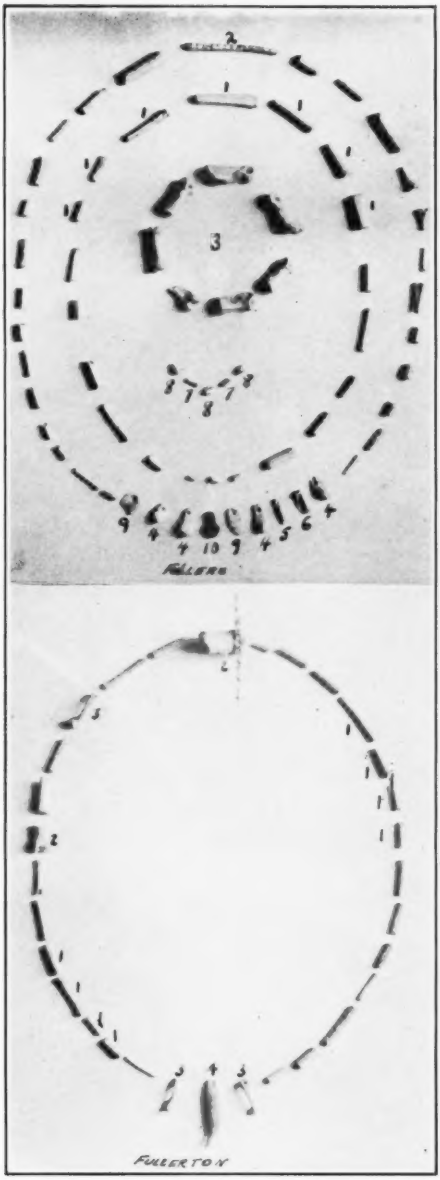


PLATE XIII

FLINT AND STONE WORK

Fuller's Hill

About fifty flint arrow points were found at Fuller's Hill, over thirty-five being of the isosceles type. (Plate IX), Rows C and D exemplify this variety. Most of the isosceles points were of the indigenous black flint, but a few were fashioned out of white and transparent chert. The workmanship was in all cases the same with close attention to all three sides.

The other flints were of the types illustrated in Row E and apparently constituted less than one-third of the flints in use around this camp. This type was even less in evidence at the Fullerton Farm.

Flint was evidently a commodity of some value, if the use of a poor grade shaly limestone for points is a criterion. These are represented in Row B, and numbered about one dozen. None had received any great attention, or if so, the effects had been obliterated by a tendency to cleave.

A few crude drills and broken scrapers were found. The presence of corn and corn cobs would lead one to expect the discovery of hoes and grinding paraphernalia, but only one pestle was noted (Plate II; Fig. 12). Numerous hammer stones (Figs. 5, 6, 7, 9, 10, 11), discoidals (Figs. 1, 2, 3, 4), and one rubbing stone (Fig. 8), were uncovered in the upper eight inches.

The pipes of limestone and slate (Plate IX; Figs. 4 and 5, respectively) are described under Burials No. 1 and No. 8. The base of the pipe represented in Fig. 3 was evidently once part of a masterpiece. The material was of granitic structure and had been rubbed down to a celt like edge at the base. A line was neatly incised about ½ inch from the extremity. The stem aperture had been drilled out in perfect symmetry. One can only conjecture on the missing portion.

A problematical piece—the "cup stone" (Plate II; Fig. 13), is quite common on Fuller's Hill. As many as four depressions on the various planes of the rough cube were noted. The rock used was always a sandstone.

Fullerton Farm

The Fullerton arrow points may also be characterized as of the isosceles group (Plate IX; Row A.). Less than one of ten were of the shanked variety. One is shown in Row A., No. 1. One flint, serrated on the two long edges, was found (Row A., No. 2). The others of the isosceles pattern were finished smoothly. None of the shaly limestones used at Fuller's Hill for making points, was utilized as such at the Fullerton Farm. The color of all of the isosceles flints was a dark gray to black. The shanked point was made of a red and brown banded chert.

A number of pipe stems made of a calcareous sandstone were found, usually well made, as the material was conducive to working. The bore in all cases was remarkably cylindrical. The type drill used was not found, but it was probably the same one that was used in drilling the straight bored shell beads found at Fullerton's, which, too, are cylindrical in bore. One embryo pipe stem was found (Plate X; Fig. 5). The outside had been completed, but the boring had not been attempted.

Discoidals, hammer stone, and rubbing stone were found in abundance near the surface and in the fire pits. One of the smoother discoidals had been perforated. Two small pestles were located in fire pits. One was broken, while the other was whole.

A small celt of diorite was found on the surface (Fig. 3). Quite a few of the so-called "cup stones" were found throughout the diggings. Their usage is problematical, in view of the great number of holes possible on any one surface. Then too, the depressions, which are quite uniform in size, are not restricted to one side of the stone, but may appear on all sides. One case where all six sides were favored was observed in one of the local collections. The holes were shaped as shallow basins, usually about one and one-half inches in diameter and from one-half to one inch in depth. Were the cups restricted to any one surface, they would appear as common geologic phenomena, but the presence on a number of sides precludes this possibility.

One broken slate medallion was found in one of the pits. It would have been about three-quarters of an inch long and one-half inch wide.

BONE AND BEAD WORK

Fuller's Hill

The bone and bead work at Fuller's Hill, Plate XI, shows a diversity of forms. Eleven of the twelve awls were made from animal long bone sections (Figs.13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24), the other being of the scapular type (Fig. 16). They were neatly finished at the tips, but there had been a tendency toward rough finish at the handle end. Utility was evidently more important than the aesthetic effect. Only one cylindrical bone section had been transformed into an awl (Fig. 15).

A bone needle fragment (Fig. 11), round in cross section, was discovered in one of the fire pits. It was highly polished, which facilitated the observance of the circular, spiral, and longitudinal striations.

Problematical pieces of worked bone were found in abundance (Figs. 1, 3, 7, 8, 9, 10, 12). A piece of deer mandible notched on the lower margin, calls for speculation (Fig. 2). Perhaps it was a method of scoring in a game.

Antler tips were at times fashioned for usage. Some were sharpened at the tips and hollowed at the other end, evidently to be used as arrow points. The example in Fig. 4, was hollowed but not pointed, having probably been intended only as a stunning force. Other pieces, about one inch long, were made into what are commonly known as "feather separators", to be used in the head-dress (Figs. 5 and 6). They were solid and were flattened on one side or two parallel sides.

As always, a great number of worked bone and antler pieces were found, to which no usage can be assigned. Some were undoubtedly finished for their purpose, while others evidently were not. It has been the custom among local collectors to name such pieces as are to be seen in Figs. 7 and 9, "loon calls" or "pheasant whistles," etc., but the fallacy of this needs no development.

The two turtle shell cups (Plate VIII; Figs. 4 and 5); were found in fire places. Number 4 was neatly trimmed, rounded and polished on three sides of the edge, leaving a slight protuberance on the fourth to serve as a handle. Many crossed striations were left on the lip from much usage.

Of beads, a variety were found, with the simple bone cylinder predominating (Plate XIII; Fig. 1). They were made of the mid-sections of small animal bones. A bead stock (Fig. 2) ready for dissemination into thirteen small beads, was uncovered in one of the fire pits. Other beads included pierced bear phalanges (Fig. 3), elk teeth (Fig. 4), a fox tooth (Fig.5), a small pierced animal scapula (Fig. 6), cowry shell and copper beads (Fig. 7), copper, (Fig. 8), cowry shells, and long bone sections rubbed down flat and pierced as in Figure 9. Shells were at times used decoratively. (See section on Worked Shells).

Slate was only once used as a bead medium (Fig. 10), and that specimen represented only the outline of the finished product, it being undrilled.

The description of the cowry shell and copper beads found with Burial No. 4, will be found under--Burials--Fuller's Hill.

Fullerton Farm

The bone and bead work found at the Fullerton site had attained to quite a development. The awls numbered eighteen (Plate XI; Figs. 4 to 19); the longest being five inches (Fig. 9). They were all made of animal long bone sections, except one, which was of the scapular type (Fig. 16). Most of them were highly finished at the points, with a tendency toward rough finish at the handle end. If the blunt end was at all smooth, it was because of a natural junction of the bone as in Figures 8 and 10. Utility again seemed to be stressed. Two bone chisels (Fig. 20 and 21) had also had considerable attention paid to the service ends. Number 20 had been fired in an attempt at tempering, and still retained a blade that could do a deal of cutting and scraping. A number of chisel blade fragments showed copper impregnation. The meaning of this association is not certain, but it, nevertheless, implies a knowledge of the metal. Copper, however, does not appear to have played a great part in the life of the people.

Antler points were again found to have been used for arrow points and "feather separators." The arrows (Fig. 1) were hollowed to allow for insertion of the shaft. One of the "separators" is shown in Fig. 3. Worked pieces

of doubtful import were found in abundance, one of which appears in Fig. 2. It is an animal rib with a number of striations near the medial end. It may have been used as a rubber.

Beads were made of diverse materials, the most common again being those from the midsections of animal long bones (Plate XIII; Fig. 1). Others included fish spines pierced at the base, pierced animal toe bones (Fig. 2), and small animal humeri bored through the distal end (Fig. 3). One large bear tusk drilled through the crown (Fig. 4), and one diamond shaped piece of slate, not perforated, were also found. The latter was probably intended as a pendant and measured one inch by one-half inch. None of these had any direct relationship to any of the burials, being found in the tepees and fire pits.

With burials 13, 14, 15 and 16 were the more unusual bead types—the drilled elk teeth, and mussel and cowry shell beads, the description of which may be found under the topic, Burials—Fullerton Farm. In Plate XII; Figs. 1 and 2 are cowry shells used as bracelets on Burial No. 13, an infant; Fig. 3 is a necklace of mussel shell beads on the same individual, while Fig. 5 represents the cowry shell beads found about the head of the same child. The drilled elk teeth (Fig. 4), and mussel shell beads were found about the neck of another child (Burial No. 15).

The fact that similar beads seemingly were seldom lost in the fire pits, is a measure of the esteem in which they were held. The source of the cowry, a marine shell, is not definitely known, but it is believed that they were migrants from the Gulf of Mexico region. It will be noticed that all of the cowry shells were perforated near the heads to allow for stringing.

SHELL WORK

Fuller's Hill

Little worked shell was found at Fuller's Hill in comparison to the tremendous number of river shells present. Four buttons were found in various stages of development (Plate XII; Fig. 1). The hole in one of them had been very neatly drilled, while those in the other pierced disc had apparently been roughly worked through. Ten mussel shells were found, to which a serrated, saw tooth

edge had been given (Fig. 5), but to which no use can at this time be attached. Shells were sometimes used as spoons, as indicated by straight line edges worn on the rims. No whole spoons were found.

Shell work was found with two of the burials. Burial No. 4, a child, had a necklace of cowry shell and copper beads (See Burials—Fuller's Hill). Burial No. 2, an aged female, had a piece of worked shell, about an inch long, and pear shaped, between the hips (Fig. 4). Near the neck of the same individual was a shell pendant with the perforation broken through (Fig. 3). The asymetric, smoothly finished piece of shell in Fig. 2 was probably intended for some use.

Fullerton Farm

The shell work at the Fullerton site exceeded that of Fuller's Hill, although not as much of the native mussel shell was used. It will be recalled that a number of shell necklaces and bracelets were uncovered (See Burials, and Bone and Bead Work). The shell disc and mussel shell bead found with Burial No. 16 are pictured in Plate XII; Fig. 7. Only one serrated mussel shell was found, as opposed to the ten found at Fuller's Hill. A fragment of a spoon is represented in (Fig. 8). It will be noticed that several decorative notches were cut in the upper edge. Fig. 9 was a dainty river shell, perforated near the hinge. It was probably worn about the neck as a pendant.

CONCLUSION

This report, quite obviously, can not have much to do with summary judgements. Such must necessarily await further exposure of the soil in this and neighboring areas. Great strides have been made this season, but in the nature of things, the story must be written in serial form. After the whole territory has been sufficiently worked over to establish any stratigraphy and chronology present; after the river bottom sites and mounds have been thoroly diagnosed and their relationship, if any, with the elevated Fuller's, Fullerton, and other hill sites established; after this factual information has been thoroly correlated with that from the known historic sites outside of the immediate region; and after all early mss. concerning the

Indians of this region have been digested and compared with the record of the soil, and only then, will archaeologists be in position to vividly portray pre-Columbian life in this country. It is common talk in every community that the Alligewi, Iroquois, and Delaware occupied this territory at various times in the past, but to determine when they did and in what order, is one of the problems. And were they the only ones that ever traveled over this region? It is quite possible that some other people antedated them, and because of remoteness in time, did not creep into the early journals on the red man, and are not yet known. What were the trade routes and what were the articles of barter of all these peoples? What were the extents of their domains and how long did they stay? Were they intelligent people, advanced in the higher arts that characterized some of the Indians, or were they imitators with no individual attainment? Were they in the no-man's-land between two or three dominant cultures and if so to what extent did they borrow from each? These questions and many more must remain enigmas, waiting for the future. The difficulties of reconstructing pre-history, however, are patent and need no further observation.

The Principal Indian Towns of Western Pennsylvania

By C. Hale Sipe

One cannot travel far in Western Pennsylvania without passing the sites of Indian towns, Delaware, Shawnee and Seneca mostly, or being reminded of the Pennsylvania Indians by the beautiful names they gave to the mountains, streams and valleys where they roamed. In a future paper the writer will set forth the meaning of the names which the Indians gave to the mountains, valleys and streams of Western Pennsylvania; but the present paper is confined to a brief description of the principal Indian towns in the western part of the state. The writer has arranged these Indian towns in alphabetical order, as follows:

Allaquippa's Town*

This town, named for the Seneca, Queen Allaquippa, stood at the mouth of Chartier's Creek, where McKees Rocks now stands. In the *Pennsylvania Colonial Records*, this stream is sometimes called "Allaquippa's River". The name "Allaquippa" means, as nearly as can be determined, "a hat", being likely a corruption of "alloquepi". This Indian "Queen", who was visited by such noted characters as Conrad Weiser, Celoron and George Washington, had various residences in the vicinity of the "Forks of the Ohio". In fact, there is good reason for thinking that at one time she lived right at the "Forks". When Washington met her while returning from his mission to the French, she was living where McKeesport now stands, having moved up from the Ohio to get farther away from the French. After Washington's surrender at Fort Necessity, July 4th, 1754, she and the other Indian inhabitants of the Ohio Valley friendly to the English, were taken to Aughwick, now Shirleysburg, where they were fed by the Colonial Authorities of Pennsylvania. Here according to George Croghan's letter of December 23, 1754, [1] Queen Allaquippa died in the latter part of that year. This noted Indian woman has often been confused with the Indian chief, Allaguipas. [2]

*The modern geographical setting of the Indian towns is given. It is suggested that the reader refer to a detailed map of Pennsylvania as he studies the article.

Allaguipas' Gap, near Bedford, and the range of mountains in the same region perpetuate the name of this Iroquois chief.

Assunepachla

This was a Delaware town, founded prior to 1731 and located near the present Hollidaysburg, Blair County. The name is from "Asun", meaning "a stone", and "Pasachsajeek", meaning "a valley". The first glimpse we get of this village in the *Pennsylvania Archives* is in the affidavit of James Le Tort, the trader, in October, 1731, in which he says that the village had at that time 12 families and 36 men. [8] The place was afterwards called Frankstown.

Aughwick

This town was situated at the mouth of Aughwick Creek, near the present Shirleysburg, Huntington County. It was likely established by the Tuscaroras during their migration from North Carolina to the territory of the Five Nations, in New York, which became the Six Nations after the Tuscaroras were admitted to the great Confederation. It is possible that the town was established as early as 1712 or 1713. The place had no Indian population when George Croghan moved to it from the Cumberland Valley in 1753. After Washington's surrender at Fort Necessity (July 4, 1754), Tanacharison, Scarouady, Queen Allaquippa and all other Indians of the Ohio friendly to the English, assembled at Aughwick and were fed by the Colonial Authorities of Pennsylvania throughout the autumn and winter, and it became the headquarters for the friendly Indians for several years. Here Queen Allaquippa died late in 1754, as before stated. In the autumn of 1754 an important conference between the Pennsylvania Authorities and Scarouady, King Beaver, Andrew Montour and other friendly Indians took place here. [9] From here Scarouady, Andrew Montour and other friendly Indians went to join Braddock's army at Fort Cumberland (the present Cumberland, Md.) early in the summer of 1755. Croghan built a stockade at Aughwick early in the autumn of 1755, known as "Croghan's Fort". Later in the same autumn Fort Shirley was erected by Governor Morris within the limits of the present town of Shirleysburg.

Black Legs Town

This was a Shawnee town, located at the mouth of the creek of the same name, probably on both sides of the creek, the site of the present town of Saltsburg, Indiana County.

Buckaloons (Buccaloons)

This was a Seneca town, later inhabited by Delawares also, located at the mouth of Brokenstraw Creek, at the site of the present town of Irvinton, Warren County. The name is likely a corruption of the Delaware "Poquihhilleu", meaning "broken". Colonel Daniel Brodhead's battle with the Senecas and the Munsee Clan of Delawares, August 15, 1779, was not far below this Indian town. At Buckaloons he constructed a breastwork and left supplies under a guard of forty soldiers while the main body of his troops pressed on to Conewango (which see) and other Seneca towns farther up the Allegheny.

Cat Fish Camp

This was the residence of the Delaware chief, Cat Fish, or Tangoocqua, located where Washington now stands. This Delaware chief was likely present at the councils of Christian Frederick Post at Kuskuskies (which see) in the autumn of 1758, when the Western Delawares decided to withdraw from their allegiance with the French. He attended a council in Philadelphia in 1759 and various councils at Fort Pitt after the French and Indian War.

Chartier's Town

This was an important Shawnee town, founded by the half-breed Shawnee, Peter Chartier, and the Shawnee chief Neucheconneh, about 1734, and located at the mouth of Bull Creek, where Tarentum now stands. It is clear that a part of the town was on the eastern shore of the Allegheny. In 1745, Peter Chartier deserted to the French, leading many of the Shawnees down the Ohio to join the French on the lower reaches of this river and on the Mississippi, robbing English traders as they went. After he left his seat on the Allegheny, this town is known as Chartier's Old Town. Likely near this town Celoron found a band of English traders in the summer of 1749 whom he ordered to withdraw from the region claimed by the French, and with whom he sent a letter of protest to the Governor

of Pennsylvania. Post crossed the Allegheny at this place when on his first mission to the Western Delawares in the summer of 1758.

Chinklacamoose

This was a Delaware town, founded probably as early as 1724 during the westward migration of this tribe and located where the present town of Clearfield stands. The name of the town is variously spelled. According to Heckewelder, it is a corruption of the Delaware "Achtschingiclamme", meaning "it almost joins"—having reference to the West Branch of the Susquehanna at this place. The Moravian missionary, Etwein, gives its meaning as "no one tarries here willingly", evidently confusing this town with Punxsutawney (which see). The latter town being infested with gnats, all early travelers complain of the annoyance caused by the ponk flies, and hence no one tarried there willingly in the summer time. Christian Frederick Post passed through Chinklacamoose while on his way to Kuskuskies (which see) in the summer of 1758. Many white captives were detained here in the early days of the French and Indian War. In the summer of 1757, it being reported that a body of French and Indians was marching against Fort Augusta at Sunbury by way of the Indian trail leading through Chinklacamoose, Captain Burd sent out a detachment under Captain Patterson to scout as far west as Chinklacamoose. This detachment found the town burned.

Conemaugh, or Conemaugh Old Town

A Shawnee and Delaware town, founded prior to 1731 and located where Johnstown now stands. The name is derived from "Conunmoch", meaning "otter". Some historians have located Keckenepaulin's Town (which see) at this place, but this is an error, arising from the misplacing of Keckenepaulin's Cabin, which was on the Quemahoning, near Jennerstown, Somerset County. We get the first glimpse of Conemaugh Town in the *Pennsylvania Archives* in the autumn of 1731. At that time Ocowellos was the Shawnee chief who ruled over this town as well as Black Legs Town and Keckenepaulin's Town.

Cock Eye's Cabin

This was a camping place on the Indian trail leading from Bedford to Shannopin's Town (which see), and located likely near Harrison City, Westmoreland County. Christopher Gist mentions it in his Journal of 1750 as does John Harris in his table of distances from Harris' Ferry (Harrisburg) to the Ohio. Cock Eye was a Delaware Indian.

Conewango

This was a Seneca town, later Delaware also, located at the mouth of the creek of the same name, which flows into the Allegheny at Warren. The name is very likely derived from "Ganowungo", meaning "at the rapids". Some authorities think that its name is derived from a word meaning "a long strip", having reference to the long strip of bottom lands where its inhabitants had their cornfields. On the bank of the Allegheny opposite this town, Celoron deposited one of his leaden plates in the summer of 1749. In February, 1759, a number of Indians from Conewango and Buckaloons attended a council with the Colonial Authorities and General Forbes at Philadelphia at which council they were positively told that the English did not intend to make any settlements west of the Allegheny Mountains—promises that were never intended to be kept. Here is what these dwellers on the Allegheny were told at this council: "The General [Forbes] knows that the French have told the Indians that the English intend to cheat them out of their lands on the Ohio, and settle it for themselves, but this, he assures you, is false. The English have no intention to make settlements in your Hunting Country beyond the Allegheny Hills". Conewango and the corn fields at the town were destroyed by Colonel Brodhead in August, 1779. The inhabitants fled from the town before his army arrived.

Cussewago, or Cassewago

This was a village of the Munsee Clan of Delawares, located at the mouth of the creek of the same name where Meadville now stands. The name is said to mean "the snake with a big belly". George Washington passed through this place on his journey to and return from Fort LeBoeuf (Waterford) in the latter part of 1753. During both the

French and Indian War and Pontiac's War, this town was occupied by Senecas as well as Delawares of the Munsee Clan. Custaloga was the Delaware chief who ruled over the inhabitants of this town and other villages on French Creek. He actively assisted Pontiac in the latter's great uprising, and was the only chief of the Munsee Delawares to sign the treaty or agreement with Colonel Henry Bouquet in 1764. For doing this the Senecas called him an "old woman" at Fort Pitt in 1765.[7] The Delawares of the Turtle and Turkey clans did not agree to the terms which Custaloga signed. Cussewago is often called Custaloga's Town (which see).

Custaloga's Town

This was a town of the Munsee Clan of Delawares, located on French Creek at the mouth of Deer Creek in French Creek Township, Mercer County. The Delaware chief, Custaloga, ruled over the inhabitants of this town. At various times he resided not only here but at Cussewago and Venango (which see).

Diondega, or Menacht-sink (Pittsburgh)

The Senaca name for the "Forks of the Ohio", after its occupation by the French, was Diondega. In the Code of Ga-ne-o-di-yo, or Handsome Lake, the Seneca prophet, who was a half-brother of the noted Seneca chief, Cornplanter, we read: "They [the Indians] land at Diondega. It is a little village of white people. Here they barter their skins, dried meat and fresh game for strong drink. They put a barrel of it in their canoes. Now all the canoes are lashed together like a raft. Now all the men become filled with strong drink. They yell and sing like demented people". The great Seneca prophet then goes on to tell of the drunken fights, the debauchery and crime among the Indians, caused by the white man's "goniga-nongi" (strong drink). Heckewelder says that the Delawares called the "Forks of the Ohio" "Menacht-sink", after its occupation by the whites. According to this authority, the term means "where there is a fence", a fence also being a fort. Father Lambing in *The Centenary of Pittsburgh* says that "Da-un-da-ga" was the Seneca name given to the "Forks of the Ohio" and that the term simply means "the forks". The name "Da-un-da-ga", used by Father Lambing, is simply a

corruption of "Diondega", used in the Code of Handsome Lake. [8]

While Shannopin's Town (which see) was the only Indian village at the site of Pittsburgh at the time when the region was first visited by the French and English, it is likely that the Senecas had at least a temporary village at "The Forks" long before the coming of the white man to the shores of the Ohio, as the Iroquois, chiefly Senecas, used the Allegheny and Ohio as a war trail to the Illinois region long before the occupation of these rivers by the Shawnees and Delawares within historic times. [9]

Gangarahhare

This was an Indian village located at the mouth of French Creek, where Franklin now stands. Only one mention is made of it by this name, and it was likely the same as Venango (which see). The meaning of the name is doubtful. It probably means "a skull fastened to the top of it".

Goschgoschunk

This was a village of the Munsee Clan of Delawares, located at the mouth of Tionesta Creek, near the present town of Tionesta, and established about 1765. The name is from the Delaware "Gosch-gosch", meaning "a hog", and the locative "ing"—hence "the place of hogs." There were two other Delaware villages near Goschgoschunk to which this name was applied, one being two miles above and the other four miles below this central village. David Zeisberger established a Moravian mission here in 1767. In April, 1769, the mission was removed to Lawunakhannek (which see), and in April, 1770 it was removed to Languntouteneunk (which see). The Senecas objected to this mission on the Allegheny, saying that the English would first build a mission, then a fort and take possession of the region. Goschgoschunk was deserted soon after the Moravian missions were removed. Colonel Brodhead passed through the place in his expedition against the Munsees and Senecas in the summer of 1779. He calls it "Cushcushing", and some writers have confused it with Kuskuskies (which see).

Hickory Town

This was a village of the Munsee Clan of Delawares, located at the mouth of Hickory Creek, Forest County. On almost the opposite bank of the Allegheny was another village of this name.

Jenuchshadega

This was a Seneca village on the Allegheny opposite the present town of Gawango, Warren County. The name is a corruption of the Seneca "Dionosadage", meaning "the place of burnt houses".

Keckenepaulin's (Kickenepaulin's) Town

This was a Shawnee village, later occupied by Delawares also, located on the Westmoreland side of the Kiskiminetas River at the mouth of Loyalhanna Creek. It was named for the Delaware chief, Keckenepaulin. As stated under Conemaugh Town (which see), some writers have confused these towns. Christian Frederick Post passed through Keckenepaulin's Town on his second mission to the Western Delawares in November, 1758. He left the army of General Forbes at Ligonier and then came as he says "to the old Shawneese town, called Keckenepolin".

King Beaver's Town

This was the residence for some years of the Delaware chief, King Beaver or Tamaque, and was located on the Ohio at or near the mouth of the Beaver. It is sometimes called Shingas' Town from the fact that King Beaver's brother, Shingas, "the bloody warrior" also had his residence here for a number of years. See also Sauconk or Sawcunk.

Kishacoquillas' Town

This was a Shawnee town, named for the friendly Shawnee Chief, Kishacoquillas, and located at the mouth of the creek of this name, which flows into the Juniata at Lewistown, Mifflin County. The name "Kishacoquillas" means "the snakes are already in their dens", according to Heckewelder, being a corruption of "Gisch-achgook-walieu". This town is also known as "Ohesson upon Choniata" (Juniata), being thus called by James Le Tort in his affidavit before the Pennsylvania Authorities in October, 1731.

Le Tort says in said affidavit that the town had at that time 20 families and 60 men, Kishacoquillas being their chief. [10] Fort Granville, which was destroyed by the Delaware chief, Captain Jacobs, on August 1, 1756, was located not far from this town.

Kiskiminetas Town

This was a Delaware town, located on the Westmoreland side of the Kiskiminetas River, about seven miles from its mouth and about opposite the mouth of Carnahan's Run. A monument, erected by the Leechburg Rotary Club, at the mouth of Carnahan's Run, calls attention to the location of the Indian town. [11] Various meanings have been given for the name "Kiskiminetas". Heckewelder says that it is a form of the Delaware word "Gieschgumanito", meaning "make daylight"; while John McCullough who was captured in Franklin County in July, 1756, and spent some time at this Delaware town, says that its name is the Delaware "Kee-ak-kshee-man-nit-toos", meaning "Cut Spirit".

Kittanning

A large and important town, founded by the Delawares of the Turkey and Turtle clans in the course of their westward migration, likely as early as 1724, and located on the east bank of the Allegheny, the site of the present town of Kittanning, Armstrong County. It is clear that part of the town was on the west bank of the Allegheny when Colonel John Armstrong and his Scotch-Irish troops from the Cumberland Valley destroyed Kittanning, September 8, 1756. The name is the Delaware "Kit", meaning "great"; "Hanna", meaning "river" or "stream"; and the locative "ing". Hence the place or town at the great river. In 1731, the traders, Davenport and LeTort, reported that there were at Kittanning "50 families and 150 men, Delawares mostly". At that time Captain Hill, of the Turtle Clan of Delawares, was the ruling chief at Kittanning. [12] When Celoron passed the place in the summer of 1749, the inhabitants fled to the forest. He called the town "Atique". This place being the western terminus of the Kittanning Indian Trail, the town began to fill up with hostile Delawares and Shawnees shortly before they began their invasion of the Pennsylvania settlements in the autumn of

1755, and from here Captain Jacobs, Shingas, King Beaver and lesser chiefs of the Delawares led many a bloody expedition before Colonel Armstrong destroyed the town, killing Captain Jacobs during the attack. Here, too, many white captives were tortured, among them being John Turner, step-father of the Girty brothers. Eleven white captives were recovered by the white men when Colonel Armstrong destroyed the town. Other captives, among them being Marie LeRoy and Barbara Leininger, were taken some miles into the forest on the western side of the river at the time of the attack and were therefore not recovered. After the destruction of the town, many of its inhabitants returned and erected their wigwams amid the ashes of their former homes. Indians assembled here in the summer of 1764 to march against Colonel Henry Bouquet at Bushy Run, and in the summer of 1782 to destroy Hannastown and raid the Westmoreland frontier. The former were of various western tribes and the latter were Senecas. The Eighth Pennsylvania Regiment assembled shortly below the present Kittanning in the latter days of 1776, and in the summer of 1779 Fort Armstrong was erected a few miles below the present town.

Kuskuskies, or Kuskuski

This was a group of four Delaware villages whose center was at or near the location of the present city of New Castle when Christian Frederick Post held his famous and important councils with Shingas, King Beaver, Delaware George and other noted Delaware chiefs at this place in the summer and autumn of 1758. The name has the same meaning as Goschgoschunk, "the place of hogs" (which see). The Delawares came to Kuskuskies as early as 1742 and established one of the most important Indian settlements in Pennsylvania. Before their coming, however, there were Seneca villages having the same name, one being at the mouth of the Shenango and the other at the mouth of the Neshannock, both at the site of the present New Castle. The Delawares at Kuskuskies were given to understand that just as soon as the English would expel the French from the Ohio Valley, they (the English) would return east of the Allegheny Mountains and leave the Indians in undisputed possession of this region. When the

English failed to keep this promise—a promise which was repeated many times— the Delawares at Kuskuskies became very suspicious of the former. In February, 1759, Colonel (later General) Hugh Mercer held an important council with the Western Delawares at Fort Pitt. At that time, King Beaver was living at Sauconk (which see). At this council, on February 24th, he reminded Colonel Mercer of the promises which the English had made, as follows: "The Six Nations and you desired that I would sit down and smoak my Pipe at Kuskusky (Kuskuskies); and what they desired me I intend to do, and shall remove from Sacunk (Sauconk) to Kuskusky". [13] The failure of the English to keep these promises was the principal reason why the Delawares, the Senecas, the Mingoes, the Shawnees and other western Indians took up arms against the English in Pontiac's War. Soon after the commencement of the Revolutionary War, the Indians of Kuskuskies moved westward to the Tuscarawas and Muskingum.

Languntouteneunk

This was the Moravian Indian village on the east bank of the Beaver between the mouths of the Shenango River and Slippery Rock Creek, in Lawrence County. Later a new town of the same name was established on the west bank of the Beaver, near the same place, called Friedensstadt by the Moravian missionaries, which is German for "City of Peace". The Delaware name has the same meaning. The Moravian mission was established in the new town in the spring of 1770, the Moravian missionaries and their Indian converts leaving Lawunakhannek (which see) and floating in their canoes down the Allegheny and Ohio to the mouth of the Beaver, thence going up this stream to their new home, Languntouteneunk, now Moravia. The mission was abandoned in 1773, and the Indian converts were removed to the new missions at Gnadenhuetten and Schoenbrunn in Ohio.

Lawunakhannek

This was the name of the Moravian mission established among the Munsee Clan of Delawares by David Zeisberger in 1769, at the site of the present town of Hickory, near the mouth of the creek of the same name in Forest County. The name means "at the meeting of the streams". The

mission was abandoned in the spring of 1770, the missionaries and their Indian converts going to Languntouteneunk, now Moravia, as stated above.

Logstown

This was an important town of Shawnees, Delawares, Mingoes, Senecas and a sprinkling of other stocks, established probably as early as 1725 during the period of the westward migration of the Delawares and Shawnees, and located on the north bank of the Ohio about eighteen miles below the "Forks", the junction of the Allegheny and the Monongahela, or, in other words, a little below Ambridge, Beaver County. Many important councils were held with the Indians at Logstown. To this town came George Croghan in the spring of 1748 with a present of goods as the agent of the Colony of Pennsylvania in an effort to win the Indians of the Ohio Valley to the English interest. He was followed by Conrad Weiser, who reached the famous town on August 27, 1748, at the head of what is usually called the first embassy on the part of Pennsylvania to the Indians of the Ohio Valley, though it would be more nearly correct to say that Croghan's mission in the spring of that year was the first. Celoron stopped here in the summer of 1749 and endeavored to win the Indians to the French interest. He was followed a few days later by George Croghan, who succeeded in counteracting his influence and who at this time purchased from Tanacharison and Scarouady three vast tracts of land on two of which stand the greater part of the city of Pittsburgh and all the towns on the south bank of the Ohio as far as the mouth of Raccoon Creek in Beaver County—the first grants by the Indian to the white man in the Ohio Valley. In June, 1752, Virginia held a treaty with Tanacharison and Scarouady at this place for the purpose of securing permissions to make settlements west of the Allegheny Mountains. At this treaty permission was given Virginia (the Ohio Company) to make a few settlements on the south and east side of the Ohio, but at the same time the Indians denied the English claim to any lands west of the Alleghenies. Washington stopped here while on his mission to the French in November, 1753. When the French took possession of the "Forks of the Ohio" in April, 1754, they destroyed George Croghan's trading house at Logstown, and

during Washington's campaign of this summer, Scarouady burned the town in order that the Indians who were in the English interest might not be tempted to live so near the French. The French rebuilt the town, however, for their Indian allies, a little farther up from the river than the site of the former town. In former times there was some dispute among historians as to the location of Logstown. Christian Frederick Post, who passed through the place on December 2, 1758, while on his way from Sauconk (which see) to the newly named Pittsburgh, describes it so accurately in his Journal as to leave no doubt as to its location. After the fall of Fort Duquesne, Croghan and other English traders established trading houses at Logstown, but nevertheless the town never became the important trading place that it was before the French and Indian War. About the time of the Battle of Bushy Run (August 6th, 1763), the Indians destroyed all the trading houses at Logstown. Colonel Henry Bouquet marched through this place on his way to the Tuscarawas, on October 5th, 1764, noting the same in his Journal of that date. General Wayne's "Legion of the United States" encamped a short distance below Logstown from November, 1792, to April, 1793. His camp was called Legionville, and the name still remains. The writer has been unable to find any satisfactory origin of the name "Logstown". The historian, Thwaites, states that the Indian name of the place was "Maughwawame", but this name does not appear in the *Pennsylvania Archives* and *Pennsylvania Colonial Records*. It may have gotten its English name from the fact that great quantities of logs and other driftwood spread over the level flats after a flood.

Logstown was the residence of Tanacharison, the Half King, sent by the Iroquois Confederation about 1747 to rule over the Delawares in the valleys of the Allegheny, Ohio and Beaver; also the residence of Scarouady, sent by this great Confederation, about the same time, to rule over the Shawnees in the same territory. They made an alliance with the English to help expel the French from these valleys with the understanding that, as soon as the French should be expelled, the English would return east of the Allegheny Mountains. Both these noted chieftains faithfully assisted the English against the French, but did not live to see the French expelled. Tanacharison became desperately

ill at John Harris' trading house, where Harrisburg now stands, in the autumn of 1754, after assisting Washington in his campaign of that year. Harris and Indians friendly to the English soothed his dying hours with their kind ministrations. Here, on the banks of the Susquehanna far from his home on the waters of the Ohio, the old chieftain, on October 4, yielded up his soul to the Great Spirit. Upon his death, Scarouady succeeded him as Half King. He died prior to August 26th, 1758, probably having lost his life in one of Johnson's expeditions in New York.

Loyalhanna, or Loyalhanning

This was a Delaware town, located where Ligonier now stands and established likely as early as 1727. The name is a corruption of the Delaware "Lawel", meaning "middle"; and "Hanna", meaning "a stream or river", with the locative 'ing", meaning 'place at or where"--hence "the town on the middle stream". The Delawares called the stream on which this town was located the "Lawel-Hanna" or "middle stream", because of its being half way from the Ohio to the Juniata. Christopher Gist described the place in 1750 as "an old Indian town". Here Colonel Henry Bouquet erected Fort Ligonier as the main part of General Forbes' army was toiling over the mountain ridges to the eastward in its advance upon Fort Duquesne in the autumn of 1758, he (Colonel Bouquet) having arrived at "Loyalhanning" on September 7th. Fort Ligonier was the only Pennsylvania post west of the Allegheny Mountains, save Fort Pitt, that did not fall into the hands of the Indians during Pontiac's War. "

Maghingquechahocking

This was a village of the Munsee Clan of Delawares, located at the junction of Conneaut Creek and French Creek, in the southern part of Crawford County. It was destroyed by Colonel Brodhead's troops in September, 1779 as they were returning to Fort Pitt from destroying the towns on the upper reaches of the Allegheny. The name is probably a corruption of "Meech-schinghacki", meaning "great level land".

Murdering Town

This was the Indian village near which Washington was shot at by a hostile Indian, less than fifteen paces distant, as he and Christopher Gist were returning from Fort LeBoeuf, on the evening of December 27th, 1753. They met the Indian at this town and thought they recognized him as one they had met at Venango. They asked him to guide them from Murdering Town by the nearest course to Shannopin's Town (which see). They had not gone far until the Indian, who was leading the way, suddenly turned and fired at Washington. Gist wanted to kill the Indian on the spot, but Washington would not permit him to do so. Accordingly they took the Indian into custody, and about nine o'clock let him go. Washington calls this town "Murdering Town" in his Journal, while Gist calls it "Murthering Town". How it got its name will likely remain a mystery. Nor can its exact location be determined. On Gist's map of 1753 there is a "Minicing Town" on Connoquenessing Creek. Darlington places Murdering Town about fifteen miles from Logstown "on a branch of Great Beaver Creek". Gist says in his Journal under date of November 30th. 1753: "We set out (from Logstown). At night we encamped at the Murthering Town, about fifteen miles, on a branch of Great Beaver Creek. Got corn and dried meat". This Indian town was likely the "Connoquenessing", mentioned in Christian Frederick Post's *Journal* under date of August 12th, 1758, as being fifteen miles from Kuskuskies. It is likely that the Indian town near the present Amberson's bridge on the Connoquenessing a few miles from Evans City, Butler County, was the "Murdering Town" referred to by Washington and the "Connoquenessing" or "Conaquonashon" referred to by Post. The Venango Indian Trail, which Washington and Gist followed from Logstown to Venango and which they followed from Venango back as far as Murdering Town on their return trip, crossed the Connoquenessing near Amberson's bridge, above mentioned. Another branch left the trail near this point and led to the headwaters of Pine Creek, thence down this creek to the Allegheny and Shannopin's Town (which see). It was this branch that Washington and Gist followed, or nearly so, after they left Murdering Town on their return trip.

Punxsutawney

This was a Delaware town, situated where the town of the same name, in Jefferson County, now stands, established probably as early as 1724 by the Delawares during their westward migration. The name is from the Delaware "Ponks", meaning "a gnat"; and "Uteney", 'a town"—hence "gnat town". Heckewelder says that the place was infested with gnats, or sand-flies. Many white captives were taken through this town to Kittanning and other Indian towns on the Allegheny and Ohio during the French and Indian War. Christian Frederick Post passed through this town while returning from his first mission to the Western Delawares in September, 1758. The place was then deserted, according to his Journal.

Pymatuning

This was a Delaware town, located near the mouth of the creek of the same name, and near the present Clarksboro, Mercer County. Heckewelder says the town derives its name from the Delaware "Pihmtomink", meaning "where the man with the crooked mouth resides". He says: "I was acquainted with the person to whose deformity there is allusion in the name of the creek". Hutchin's map of 1764 places Pymatuning on the west side of the Shenango below Clarksville, while Scull's map of 1770 places it on the east side. Probably, like a number of other Indian towns, it was on both sides of the stream.

Rique

Rique was the largest town of the Eries, located on or near the site of the present city of Erie. It was destroyed about 1655 by the Senecas, the most numerous and warlike tribe of the Six Nations or Iroquois. The conquerors "wrought such carnage among the women and children that the blood was knee-deep in places". According to the Jesuit *Relation*, the town, had in 1654, between 3,000 and 4,000 combatants, exclusive of women and children. After the breaking of the power of the Eries, the survivors were either destroyed, dispersed or led into captivity. Six hunded were taken by the Senecas to the present Livingston County, New York, where their

offspring were absorbed by the Seneca tribe. After the destruction of the populous tribe of the Eries, that part of Pennsylvania south of Lake Erie became infested with wolves.

Sauconk, or Sawcunk

This was a town established by the Delawares and Shawnees possibly as early as 1725 during their westward migration and was located at the mouth of the Beaver and for some distance below. The Indian settlement at the mouth of the Beaver (Sauconk, King Beaver's Town, Shingas' Town, etc.) extended to the bluff above the Ohio about a mile below the mouth of the Beaver at various times in the history of this settlement. Weiser went to Sauconk when on his mission to the Western Indians in 1748. He says in his *Journal* under date of August 30th: "I went to Beaver Creek, an Indian Town, about 8 miles off (from Logstown), chiefly Delawares, the rest Mohawks". Post visited the place when on his mission to the Western Delawares in the summer and autumn of 1758. The town was deserted after the Battle of Bushy Run, August 5th and 6th, 1763. When Bouquet's expedition passed through the place in the autumn of 1764 on its way to the Tuscarawas, the chimneys of the houses which the French had built for the Indians were still standing. The name "Sauconk" is a corruption of the Delaware "Sakunk", meaning "at the mouth" of a stream.

Sewickley, or Sewickley Old Town

This was a town of the Sewickley (Hathawekela) Clan of Shawnees, established prior to 1731 and located at the mouth of Big Sewickley Creek, Westmoreland County. The town stood near the present town of West Newton. However, there was another Shawnee town also called Sewickley, which stood on the north bank of the Allegheny below Chartier's Town, now Tarentum, Allegheny County. The Sewickley Shawnees are described in an affidavit made by the trader, Jonah Davenport, October 29, 1731, as "fifty families lately from South Carolina to Potowmack (Potomac), and from thence thither, making 100 men. Aqueloma is their chief"." One of the tracts

of land which George Croghan bought from Tanacharison and Scarouady at Logstown in August, 1749, was located at the mouth of Big Sewickley Creek.

Shannopin's Town

This Delaware town, established as early as 1730 and named for the Delaware chief Shannopin, stood below the mouth of Two Mile Run, between the present Penn Avenue and the Allegheny River, north of Thirtieth Street, Pittsburgh. At this place the Indian trail leading from Harris' Ferry (Harrisburg) crossed the Allegheny. Celoron, Croghan, Gist, Washington, Weiser and many other early pathfinders visited this town. It was just above this town where Washington was almost drowned in the icy waters of the Allegheny as he was returning from his mission to the French, December 29, 1753. After this terrible experience, he spent the night on the former Wainwright's Island and then he and his companion, Christopher Gist, went to the trading house of John Fraser (the writer's ancestor) at the mouth of Turtle Creek. Chief Shannopin and about half a dozen other Delawares wrote a letter by the hand of the trader, Edmund Cartlidge, to Governor Gordon on April 30th, 1730, protesting against the ravages of the rum traffic and requesting the Governor to put a stop to the carrying of such large quantities of rum "into the woods".

Shawnee Cabins

This was a temporary stopping place of the Shawnees as they migrated from the Potomac to the Ohio, and was situated about eight miles west of Bedford and about half a mile east of Schellsburg, Bedford County. Among those who mention this place are John Harris and Conrad Weiser.

Shenango

This was a Delaware town on the river of the same name, located as nearly as can be determined, below the present town of Sharon. The name is a corruption of "Ochenango", meaning "large bull thistles". John McCullough, who was captured in Franklin County in July, 1756, spent two years and a half among the Delawares at Shenango.

Venango

This was an Indian town and prominent trading place, located at the mouth of French Creek, the site of the present town of Franklin, Venango County. The name is a corruption of "Onenge", meaning "a mink", according to Zeisberger and Loskiel. As Dr. George P. Donehoo points out in his *Indian Villages and Place Names in Pennsylvania*, the name as commonly used by the Delawares was "Winingus", a "mink". Washington stopped at this town when going to and returning from the French fort, LeBoeuf, where Waterford now stands. In the summer of 1749, Celoron stopped here, on which occasion the trader, John Fraser, and all the Indians except six Iroquois fled to the woods. The French drove Fraser away from this place in the summer of 1753. Here the French erected Fort Machault. In the summer of 1759 about one thousand Indians assembled here to attempt to recapture Fort Duquesne. In 1760, the English built Fort Venango at the mouth of French Creek, but this fort was burned in June, 1763, by the Indians during Pontiac's War. In the spring of 1787, a detachment of United States soldiers under Captain Jonathan Hart erected Fort Franklin at this place.

1. *Pennsylvania Archives*, Vol. 2, p. 218.
2. *Pennsylvania Colonial Records*, Vol. 6, p. 588.
3. *Pennsylvania Archives*, Vol. 1, pp. 301, 302.
4. *Pennsylvania Colonial Records*, Vol. 6, pp. 150-160.
5. *Pennsylvania Archives*, Vol. 1, pp. 301, 302.
6. *Pennsylvania Colonial Records*, Vol. 8, p. 269 and pages preceding.
7. *Pennsylvania Colonial Records*, Vol. 9, p. 253.
8. Donehoo, George P., *Indian Villages and Place Names in Pennsylvania*, p. 155.
9. *Pennsylvania Archives*, Second Series, Vol. 6, p. 57.
10. *Pennsylvania Archives*, Vol. 1, pp. 301, 302.
11. See also *Pennsylvania Archives*, Vol. 2, p. 136, for the distance of this town from the mouth of the Kiskiminetas.
12. *Pennsylvania Archives*, Vol. 1, p. 301.
13. *Pennsylvania Colonial Records*, Vol. 8, p. 307; Donehoo, George P., *Pennsylvania—A History*, II, 864-870, 882; and the writer's *Indian Wars of Pennsylvania*, pp. 407-412, for promises made by the English to withdraw east of the Allegheny Mountains as soon as the French were driven from the Valley of the Ohio.
14. For account of the events which happened at and in the vicinity of Fort Ligonier during the French and Indian War, Pontiac's War and the Revolutionary War, see the writer's *Indian Wars of Pennsylvania*.
15. *Pennsylvania Archives*, Vol. 1, pp. 301, 302.

The Development of the Tinplate Industry

Memoirs of W. C. Cronemeyer

(Continued from January Issue)

The following are a few extracts from his harangue as copied from the Congressional Record:

"Such is the so-called tinplate industry which under the McKinley Bill, conceived in the tinplate lies of Cronemeyer, has now been borne under Treasury midwifery and to which American Industry has now been issued fraudulent naturalization papers by the administration" . . . .

"The petitioners for the increased duty on tinplate was a lobby, worked by a paper concern under the title of American Tin Plate Association. A number of sheet iron and sheet steel concerns constituted the shadow of organization while its secretary, one Cronemeyer, constituted its substance" . . . .

"Mr. Cronemeyer, as agent of a confessed non-supporting project was potent enough in the Ways and Means Committee room of the 51st Congress to *dictate* (sic) terms to two thousand bona fide canning concerns and four thousand tinware concerns which had demonstrated their ability to take care of themselves; whose interests were jeopardized by legislation. He filled out the blank and the Committee signed it" . . . .

"This supple secretary issued a tract in which he asserts that his association was actuated by a "patriotic feeling" (then he recited the circular we had issued at the time we made the demonstration at the Pittsburgh Exposition).

"The argument used by Cronemeyer found admission and voice in Senator Allison's assertions made in the Senate" . . . .

He recited the report which the majority of the Ways and Means Committee made when submitting the McKinley Tariff Bill and then said: "Here we have the bold hypothesis on which the leading committees of House and Senate predicated their action in supporting the Cronemeyer claims of the McKinley measure. Every prediction made by the committee has been disproved in fact." He

also asserted: "From June 1st to October 1891, three months after the bill became a law, tinplate advanced from $4.35 to $5.16 per box at New York" — "Coincident with the Cronemeyer law prophetic subterfuge turned to spot lying."

That was an untruth on his part, the price had gone to $5.35 really before ever the duty had gone into effect.

He further exclaimed: "Cronemeyer with characteristic veracity asserted while before the Ways and Means Committee as a reason why Wales could make tinplate cheaper than his own works: Welsh manufacturers got their labor from $2.25 to $2.50 per box cheaper than he did, whereas the whole cost is only ninety-nine cents;" that was prevarication again. Ninety-nine cents was the cost of labor in the tin house alone but not of that in the production of the raw materials from the iron ore to the finished black plates in the U. S.

He wound up: "The tinplate industry as now developed and put on record is a finishing shop for Welsh consignments of cold rolled pickled and annealed steel plates."

During the discourse, Mr. Bunting was interrupted several times by Mr. John Dalzell who refuted effectually many of the former's assertions and statements. In his references to me Mr. Bunting's language had even been more insulting than they appeared later in the Congressional Record. Mr. Dalzell had insisted that Bunting use more polite language in the printed form. I surely felt insulted enough and was sorely vexed over the fact that Congressmen are inviolable for what they may say or do while on the floor of the House.

Professor Wm. L. Wilson of Morgantown, West Virginia, who later became the Chairman of the Ways and Means Committee and still later U. S. Postmaster General sided with Mr. Bunting in ridiculing the attempts of the American Manufacturers.

Notwithstanding the agitation of the antagonists, the ranks of prospective tinplate manufacturers grew perceptibly. The U. S. Works at Demmler became a regular mecca for the engineers and investigators; they profited by the mistakes we had made at first but corrected later by experience, and moreover many improved methods were sug-

gested by some of them which could be and were adopted by the novices, who in that way gained from the start advantages over the pioneer concern, which was not rich enough to demolish old machinery and install new every time an improvement was suggested.

But in 1892 occurred the notorious Homestead Strike the effects of which reverberated through the whole country. It was water on the mills of the Democrats.

Although the report of the Judiciary Committee of the House which had investigated the cause and effects of the strike was rather neutral and placed the guilt equally on both the employers and employees, the labor unions all over the country and with them the majority of the common people sided with the workmen. The employment of Pinkerton detectives in labor disputes was denounced. Large corporations and their industrial systems became unpopular and the Republican Party was blamed for fostering them. A general unrest pervaded the country. That general feeling was no doubt largely the reason for Benjamin Harrison's defeat and Grover Cleveland's re-election as President of the United States.

When in May, 1891, the American Tinned Plate Association was reorganized, I was urged to accept the office of President but I declined, believing that a new name at the head would make a better impression on the public mind. Moreover the manufacturers of black and galvanized sheet iron had at that time an informal organization for the purpose of negotiating with the Amalgamated Association of Iron and Steel Workers regarding the scale of wages and I was acting as Secretary for them. Filling that job gratis besides attending to my duties as President of the United States Iron and Tinplate Company was enough without taking an additional thank you (?) job.

In 1892 the Sheet Iron Manufacturers concluded to organize into a permanent association. John G. Battelle of Piqua, Ohio, was made President and George McMurtry of Pittsburgh and Apollo, Pennsylvania, Vice President. To act as permanent Secretary and at the same time hold my position with the United States Iron and Tin Plate Company, I had not the time and the strength. Learning that John Jarrett was not as well pleased with the consular work

in Birmingham as he expected, I suggested that the association offer the position of Secretary to him. I was authorized to ask him if he would accept. To my question he gladly answered yes, and within a month he was back in the United States and at work for the Sheet Iron Association.

In 1893 Mr. Britton resigned as President of the Tinned Plate Association and without my solicitation and in fact much against my wish I was elected to the position unanimously and this time I could not well decline.

At about the same time arrangements were made between the Sheet Iron Association and the Tinned Plate Association to have John Jarrett act as Secretary for both and then the two associations occupied the same office.

Col. Battelle, George McMurtry, John Jarrett, and I worked together harmoniously.

At the World's Columbian Exposition in Chicago in 1893 the **Associated Manufacturers of Tin and Terne Plate of the United States** made a very creditable exhibit. At that time the number of companies and firms who were either operating complete works or were rolling black plates for tinning purposes or were tinning bought black plates was forty-seven.

The following is a list of those pioneer concerns:

Alliquippa Tin Plate Company, Alliquippa, Pa.
American Stamping Company, Brooklyn, N. Y.
American Tin Plate Company, Elwood, Ind.
American Tin Plate Machine & Mfg. Co., Philadelphia, Pa.
American Tin and Terne Plate Company, Philadelphia, Pa.
Apollo Iron and Steel Company, Apollo, Pa.
Baltimore Steel, Iron & Tin Plate Co., Baltimore, Maryland.
Blairsville Rolling Mill & Tin Plate Co., Blairsville, Pa.
Buhl Stamping Company, Detroit, Mich.
Chicago Tin Plate Company, Chicago, Ill.
Cincinnati Corrugating Company, Piqua, Ohio.
Cleveland Tin Plate Company, Cleveland, Ohio.
Coates and Company, Baltimore, Md.
Columbia Tin Plate Company, Piqua. Ohio.
Cumberland Rolling Mill & Tin Plate Co., Cumberland, Md.
Duquesne Tin Plate Company, Pittsburgh, Pa.
Falcon Tin Plate and Sheet Company, Niles, Ohio.
Griffith & Cadawallader, Pittsburgh, Pa.
Gummey and Spering Company, Philadelphia, Pa.
Hughes and Patterson, Philadelphia, Pa.
Indiana Tin Plate Company, Atlanta, Ind.
Iron Clad Can Company, New York, N. Y.
John Hamilton, Pittsburgh, Pa.

Kahn Brothers, New York, N. Y.
Laufman and Company, P. H., Apollo, Pa.
Lalance and Grossjean Mfg. Company, New York, N. Y.
Marshall Brothers and Company, Philadelphia, Pa.
Matthai Ingram and Company, Baltimore, Md.
McKinley Tin Plate Company, Wilkinsburg, Pa.
Merchant and Company, Philadelphia, Pa.
Morewood Tinplate Manufacturing Co., Elizabeth, N. J.
Morewood and Company, E., Gas City, Ind.
New Castle Tin Plate Company, New Castle, Pa.
Norristown Tin Plate Company, Norristown, Pa.
Norton Brothers, Chicago, Ill.
Phillips Tin Plate Company, Philadelphia, Pa.
Pittsburgh Electro-Plating Company, Apollo, Pa.
Pittsburgh Tin Plate Works, New Kensington, Pa.
Record Manufacturing Company, Conneaut, Ohio.
Scott and Company, James B., Pittsburgh, Pa.
Sidney Shephard and Company, Buffalo, N. Y.
Somerton Tin Plate Works, Brooklyn, N. Y.
St. Louis Stamping Company, St. Louis, Mo.
Taylor and Company, N. & G., Philadelphia, Pa.
Thomson and Company, A. A., New York, N. Y.
U. S. Iron and Tin Plate Mfg. Co., Demmler, Pa.
Wallace, Banfield and Company, Irondale, Ohio.

According to Special Agent Ira Ayer's report the amount of tin and terne plates produced in the United States during the fiscal year ending June 30, 1893, was, from home made black plate	43,599,724	Lbs.
From imported black plate	56,219,478	"
Total	99,819,202	"
During the year ending June 30th/94 from home-made black plate	85,968,202	"
From imported black plate	53,255,265	"
Total	139,223,467	"

which showed that at the end of the third year in which the new duty had been in effect the home production was but a little over six million pounds short of the amount which would have to be produced at home under the provision of the Spooner amendment in any of the six years after 1891 to make the rate of 2 2/10c per pound permanent; providing the McKinley law endured, but it did not endure.

During the 52nd Congress the Bunting Bill did not come to a vote, but in the election of 1892 the Democrats had gained the Presidency as well as the majority in both Houses of Congress and as soon as the 53d Congress had convened in 1893, Professor William L. Wilson of West Virginia who has been made the Chairman of the Ways

and Means Committee started to construct a new Tariff Bill. It soon became known that very sharp reductions would be made throughout the metal schedule and during the spring and summer of 1893 we were kept on the anxious seat.

Numerous delegations of the Tinplate Manufacturers went to Washington to plead with the committees to make the duty on Tinplate at least equitable with the rates on other iron and steel products but when in October 1894 the bill had finally been enacted into law the rate on tinplate was fixed at only 1 2/10c per pound and that was proportionally lower than the rates in the rest of the metal schedule.

The manufacturers concluded that the rate was not sufficient to protect against foreign competition unless the wages of the mill workers were reduced. The workmen, members of the Amalgamated Association of Iron and Steel Workers resisted such reduction and went on a strike which lasted for three months when a compromise was effected, and the manufacturers started up the works again.

The market price of Tinplate dropped considerably but so did the price of all iron and steel products especialy those of steel billets and sheet bars which constitute the principle raw material in the production of tinplates and so it appeared as James M. Swank expressed in the American Iron and Steel Association Bulletin that the Tinplate Industry "could at least still vegetate."

During the middle of the nineties the country was laboring under quite a severe business depression but the Tinplate Industry had already gained such impetus that it kept on growing rapidly.

The construction of several additional works had already been started and the owners of some of the works already in existence had made plans for additions and very many improved labor saving devices before the Wilson Bill had been inacted and they carried them to completion. Even some of the importers who had been the bitterest antagonists had embarked in the manufacturing business themselves.

Ira Ayer's reports for the fiscal year ending June 30, 1896, showed the number of firms engaged in the manufacturing of tin and terne plate as the close of that year to be ----------74
of which the number of firms making or preparing to make black plates was ----------43
The number of hot mills for rolling black plates completed or in process of construction was ----------188
The number of tinning sets completed or in process of construction was ----------460

During the preceding two years the selling prices of Tine and Terne Plate had been dropping continually until early in 1897 TC 14 x 20 bright plates were selling at from $2.90 to $3.00 fob mill or at about $1.30 per box less than the price had ever been before the enactment of the McKinley law, and strange to say that phenomenon was not brought about by foreign but by home competition.

Several causes had brought about this result:

Many of the people who embarked in the tinplate manufacturing business were not as familiar with the commercial as with the technical branch of the business. They did not know the trade. When they got ready to sell they would—instead of hunting new fields of which there were yet many—approach the customers of those who had already established a trade and tried to secure orders by quoting prices a little below the market and though the customers were generally loath to abandon a source of satisfactory supplies they would make use of the quotations of the newcomer to beat down the prices of their regular suppliers and then the latter would submit rather than lose a good customer.

Another reason for the continued depression in prices was the attitude which the importers and large dealers assumed when they saw the import business dwindling. They had for many years handled practically all the tinplate used in the United States. They were thoroughly familiar with the commercial side of the trade; they had their customers and they knew their requirements. Beyond that they had accumulated abundant capital of which most of the mill owners were short. It was the usual experience with those who erected new tin plate works that the plants

would cost from 50 to 60% more than had been estimated and provided for and when they were ready to begin operation they found that they had not sufficient working capital. Of this the dealers took advantage by offering to pay spot cash for the plates as they were produced and delivered and would often receive the entire output of a concern which had not yet learned to figure exact costs and obtain it at prices much below the market and sometimes below manufacturing costs.

In addition the capacity for production was increasing so fast that over-production was threatening.

In November 1896, Governor McKinley was elected President with a Congress in both branches of which the Republicans were in the majority and another general revision of the tariff was undertaken early in 1897 by Nelson Dingley of Maine who was the Chairman of the Ways and Means Committee of the 55th Congress.

Amongst the tinplate manufacturers there existed now a difference of opinions. Some argued that inasmuch as the ruling American prices were less than the prices quoted in Liverpool plus the import duty, it would be of no use to ask for an increase in the tinplate duty; but others argued that the duty must be increased so as to be in harmony and equity with the other rates in the metal schedule, because in the future, conditions might arise which would make government protection an urgent necessity. The new duty on Tinplate was fixed at 1 5/10c per pound. The wisdom of the latter was proven in the following years when a large demand for iron and steel products sprung up in the United States and the prices of the raw material needed in tinplate making jumped up considerably while in Europe they remained at a rather low stage. During 1896 and 1897 the capacity of the mills as well as the home production of tin and terne plate continued in rapid strides.

At the end of the six years specified in the Spooner Amendment the home manufacturers were supplying not only one third of the home demand, but practicaly all of it except that of the exporters of products put up in tin plate containers. They, when they used imported plates in the fabrication of containers were allowed a rebate of 90% of

the duty paid and that made to them the cost of the imported plates still considerably less than that of the home made.

Home competition remained keen and the net earnings of the mills were not satisfactory. A number of efforts were made by the members of the Tinned Plate Association to stabilize the market and to maintain uniform practices in their dealings with the trade. The first was a gentlemen's agreement not to sell plates below a minimum base. That seemed to help for a little while until it became evident that somebody was making "sub rosa" contracts at cut prices; then an endeavor was made to get all the manufacturers to agree to sell their product through a General Sales Agency but that fell through. Then when the Dingley Tariff was being formulated an effort was made to induce Congress to annul the rebate clause and thereby make the exporters use home made plates instead of imported and thereby increase the demand for the former considerably. At one time it seemed that we would succeed in that, but the Standard Oil Company, the largest beneficiary under the rebate clause succeeded in vetoing it. And so sharp competition and price cutting continued for a while longer.

The following table will show how home production increased and the imports decreased during the years from 1892 to 1898:

Fiscal Year	Tin & Terne Imported Pounds	Re-Export under Drawback Claim Pounds	Net Imports Pounds
1892	403,030,785	119,928,083	283,102,702
1893	611,949,980	128,863,227	483,086,753
1894	436,780,713	161,758,361	275,022,352
1895	513,963,401	126,777,800	387,185,601
1896	385,070,372	137,659,779	247,410,593
1897	244,407,601	139,246,130	105,161,471
1898	171,911,226	137,897,570	34,013,656

	Black Plate Imported Pounds	Black Plate Home Production Pounds	Tin and Terne Home Production Pounds
1892	4,350,166	9,296,553	13,646,719
1893	56,219,478	43,599,724	99,819,202
1894	53,255,265	85,968,202	139,223,467
1895	33,224,139	160,576,934	193,801,073
1896	4,226,523	303,002,098	307,228,621
1897	5,208	446,982,063	446,982,063
1898	B No official statistics available 1898		

The investigations and reports by Special Agent Ira Ayers were discontinued at the end of the six year period specified in the Spooner Amendment but unofficially it can be stated that the production increased fully 33⅓% over the production in 1897.

All other efforts to stabilize the industry having failed, the idea to combine all the several smaller establishments into one larger corporation took root and began to grow. The advantages which would be gained by such a union were pointed out by economists and recognized by most of the leading stockholders in the larger establishments. By comparing notes, managers of various mills discovered that the cost of manipulating the various processes in the production stages varied materially in their several mills. In one mill the cost of one certain process was much lower than other mills while another process was manipulated at a higher cost than in other mills and so vice versa. In a combined corporation the least costly methods in manipulating the various processes could be adopted in all the mills controlled by it. From the many labor saving devices which had by that time been invented by Yankee ingenuity and had been adopted by one or the other firm the best and most economical ones could be selected and be installed in all the mills. The cost of distribution of the product and the aggregate of over-head expenses could be reduced very materially. Realization grew that in such a manner the industry could be placed on a profitable basis; that prices could be stabilized but need not be increased very materially. In fact it seemed possible that by means of the many much improved methods the United States might soon be able to compete with European Manufacturers in foreign markets and still continue paying the workmen at the existing, so much higher than the English, rates of wages.

In the second half of 1898, Judge W. H. Moore, who had previously promoted the consolidation of several industrial establishments in other lines of trade, together with D. G. Reid and W. B. Leeds of the American Tin Plate Company at Elwood, Indiana, and Mr. F. S. Wheeler undertook the task of bringing about a consolidation and in December of the same year they accomplished it successfully.

Besides the sellers of the several mills, many outside capitalists, amongst them, especially some of the large dealers who had lost the import business, became large and influential stockholders in the new corporation which was now placed on a very substantial financial basis.

The following is a list of the Companies, and their capacity in sets of black plate rolling mills, whose works, or that part of whose works which was adapted to tinplate making, were absorbed by the American Tin Plate Company:

Aetna-Standard Iron & Steel Company, Bridgeport, Ohio	8	Mills
American Tin Plate Co., Elwood, Ind.	20	"
American Tin Plate Co., Montpelier, Ind.	5	"
Atlanta Steel & Tin Plate Co., Atlanta, Ind	5	"
Baltimore Tin Plate Co., Baltimore, Md.	2	"
Beaver Tin Plate Co., Lisbon, Ohio	6	"
Blairsville Rolling Mill & Tin Plate Co., Blairsville, Pa.,	2	"
Britton Rolling Mill Co., Cleveland, Ohio	3	"
Canonsburg Iron & Steel Co., Canonsburg, Penna.	4	"
Cincinnati Rolling Mill & Tin Plate Co., Cincinnati, Ohio	4	"
Crescent Sheet & Tinplate Co., Cleveland, Ohio	6	"
Cumberland Steel & Tinplate Co., Cumberland, Md.	5	"
Elwood Tinplate Company, Ellwood City, Pa.	5	"
Falcon Tinplate & Sheet Co., Niles, Ohio	6	"
Great Western Tin Plate Co., Joliet, Illinois	4	"
Hamilton and Co., West Newton, Pa.	2	"
Humbert Tin Plate Co., Connellsville, Pa.	6	"
Irondale Steel & Iron Co., Middletown, Ind.	2	"
Johnstown Tin Plate Co., Johnstown, Pa.	2	"
LaBelle Iron Works, Wheeling, W. Va.	10	"
Laughlin Neil Co., Martins Ferry, Ohio	14	"
Marshall Brothers and Company, Philadelphia, Pa.	6	"
Monongahela Tin Plate Co., Pittsburgh, Pa.	14	"
Morewood Company, The, Gas City, Ind.	8	"
Morton Tin Plate Co., Cambridge, Ohio	6	"
National Tin Plate Company, Anderson, Ind.	6	"
National Tin Plate Company, Monessen, Pa.	9	"
New Castle Steel & Tin Plate Co., New Castle, Pa.	20	"
Neshannock Sheet & Tin Plate Co., New Castle, Pa.	6	"
Ohio River Sheet & Tin Plate Co., Rochester, Pa.	2	"
Pennsylvania Tin Plate Co., New Kensington, Pa.	6	"
Pittsburgh Tin Plate Co., New Kensington, Pa.	6	"
Rieves Iron Co., Canal Dover, Ohio	6	"
Shenango Valley Steel Co., New Castle, Pa.	30	"
Somers Brothers, Brooklyn, N. Y.	3	"
Star Tin Plate Co., Pittsburgh, Pa.	8	"
Stickney Iron Co., Baltimore, Md.	2	"
U. S. Iron and Tin Plate Co., Demmler, Pa.	11	"
Wallace Banfield and Co., Irondale, Ohio	4	"
Washington Steel & Tin Plate Co., Washington, Pa.	4	"
	279	"

The first officers of the Corporation were:

D. G. Reid ---------- President
W. B. Leeds ---------- first Vice President
W. T. Graham ---------- second Vice President
Warner Amus ---------- third Vice President
F. S. Wheeler ---------- Treasurer
E. G. Applegate ---------- Secretary
H. B. Wheeler--Assistant to Treasurer & Secretary

Executive Committee:

W. B. Leeds, Chairman
W. H. Moore — W. T. Graham
D. G. Reid — Warner Amus

Board of Directors:

George Greer	F. S. Wheeler	W. B. Leeds
W. H. Donner	W. T. Graham	W. H. Moore
Cecil A. Robinson	James McLean	W. E. Reis
Warner Amus	James H. Moore	R. R. Quay
James B. Dill	D. G. Reid	James A. Mathews

When the U. S. Iron and Tin Plate Company concluded the negotiation for the transfer of its work with the promoters it was verbally understood that it, the foremost pioneer concern, should have a representative on the board of the new Corporation. The directors of the U. S. Company designated me for that place; but when the organization was completed and published it appeared that I was not admitted to the inner circle but was relegated to minor position. A plausible reason for that was never vouch-safed me.

Some of the directors of the U. S. Company called on Judge W. H. Moore, the chief promotor, for an explanation. The one he gave them was that the general opinion was that I was getting pretty old (I was still in the fifties) and inasmuch as apparently I had so far not gathered a competency for myself it was doubted that I would be of much help in the way of making money for the corporation. That I was still comparatively poor was true, but how could I have made much money honestly, when besides managing the affairs of a company which was not very strong financially and could not pay high salaries, I had devoted all the time I could spare to experimenting and agitating for such equitable protection as was needed to establish the industry on a safe basis.

No, that was not the true reason. From friendly members amongst the chosen ones, I learned that strenuous objections to me had been made and my character

had been assailed by one influential party whom I had refused to support in political affairs, and by other ones, who were still resentful because—as they claimed—it had been I who had destroyed their import business.

One of the stipulations in the agreement by which the U. S. Works were conveyed to the American Tin Plate Company was that—though not in writing but by word of honor—the active managers of the former would pledge themselves not to start or engage in any competition to the new Corporation during the next five years. Legally I could have broken that pledge but though I had an opportunity to do so, I did not feel justified and being really in need of some fixed income I accepted the assignment the higher official gave me.

Of the further developments within the Corporation I cannot make any authentic reports. Would not if I could. "Those old songs I cannot sing, they are too sad to me."

In 1901 the American Tin Plate Company became a subsidiary of the U. S. Steel Corporation and as such was later consolidated with the American Sheet Steel Company itself a consolidation of the manufacturers of black and galvanized sheet iron which had also become a subsidiary of the U. S. Steel Corporation and the combined companies were then named the American Sheet and Tin Plate Company.

In 1905 impaired health caused by the after claps of a severe fever; family bereavement and other reverses and disappointments compelled me to sever my connection with the American Sheet and Tin Plate Company after I had spent thirty three years in endeavors to help in developing a new and important American Industry. On physicians advice I had to seek occupations in rural regions.

In later years several Tin Plate Manufacturing Companies have been established independent of the U. S. Steel Corporation and some have grown to very large dimensions.

The telling of their subsequent development, as well as those in the American Sheet and Tin Plate Company, should it be called for, I shall have to leave to another writer.

BOOK REVIEW

The Indian Wars of Pennsylvania. By C. Hale Sipe of the Pittsburgh and Butler bars, author of *The Indian Chiefs of Pennsylvania*. Introduction by Dr. George P. Donehoo, former State Librarian of Pennsylvania, Collaborator of the *Hand Book of American Indians* by the Smithsonian Institution. The Telegraph Press, Harrisburg, Pa. To be ordered from the author, Box 536, Butler, Pa. $5.00.

This beautifully printed and beautifully illustrated volume of 793 pages will be welcomed by every lover of the history of Pennsylvania. Since its appearance, Pennsylvania is the first and only state in the Union to have an exclusive history of its Indian wars and uprisings. The book discloses an immense amount of scholarly research, and is charmingly written. No library, public or private, will be long without it.

It opens with a sketch of "The Pennsylvania Indians --Their Religion and Character", and then goes on through an enumeration and description of the Pennsylvania Indian tribes, a discussion of the just Indian policy of the Swedes on the Delaware and of William Penn, and the "Principal Indian Events from 1701 to 1754". Then the pages thicken up with the campaigns, battles, atrocities and tragedies of the French and Indian War, Pontiac's War, Lord Dunmore's War and the Indians' part in the Revolutionary War, and finally through the "Post-Revolutionary Uprising", ending with the defeat of the Western tribes at Fallen Timbers by General Anthony Wayne, in August, 1794, and the consequent signing of the Treaty of Greenville, in August, 1795. One fine feature of the book is that it specifically locates the battles, atrocities and tragedies. The reader is never left to guess where the important and tragic events took place. Another valuable feature is the setting forth of the real causes of these Indian wars in Pennsylvania. As one reads the account of Pontiac's War, for instance, he clearly sees that the great historian, Parkman, never found the real cause of this bloody uprising.

The author of this masterly work has already indebted Pennsylvanians to him by his former volume on *The Indian Chiefs of Pennsylvania*, and now he has greatly increased this debt by this much larger volume. While the New England States, as a group, have a history of their Indian wars, Pennsylvania is the first and only state in the Union to have an exclusive history of the forty years of conflict between the Indian and the white man within its borders. For completing this monumental work, the author deserves the thanks of every lover of the early history of the Keystone State.

Mr. Sipe bases this work primarily on the *Pennsylvania Archives* and *Colonial Records*. It is therefore not a collection of frontier tales of doubtful historical basis, but an accurate and scientific history of the most romantic, the most thrilling, the most tragic, and, in many respects, the most important period in Pennsylvania's mighty past. One realizes as he peruses the pages of this volume that, if the Pennsylvania frontiersmen had not had the discipline and hardships of these Indian wars, the Revolutionary War would likely have been doomed to failure. The Pennsylvania frontier was, as Dr. Donehoo says in the introduction, the "West Point" of many of the distinguished Generals of Washington's army. One realizes, too, when perusing Mr. Sipe's volume that, if the Indian policy of the Swedes on the Delaware, and of William Penn, had been followed by Penn's successors, the Indian problem in Pennsylvania would very likely have worked itself out without literally drenching the soil of the Keystone State with the blood of the Indian and the pioneer. The Indian policy of the Swedes, it is seen, lay at the foundation of the success of William Penn. Furthermore, as pointed out in this history, the Swedes on the Delaware established religious liberty in Pennsylvania at a time when it was a mockery or a myth in New England and other places in the Western World.

The author has been careful to maintain a just balance between the Indian and the white man. Hence, there is no whitewashing in this book of either individual actions or general policies of the settlers when, to our later and unprejudiced eyes, they seem reprehensible.

In a word, this book is an accurate, detailed and splendidly written history of the forty years of conflict between the Indian and the white man in Pennsylvania. Not the least of its value and charm is the setting forth of the tragedies, even the smaller ones, in the cabin homes of the pioneers. In this book, the pioneer who laid down his life has a place in history along with the noted military leaders.

In no other volume can be found half as much of the early history of Pittsburgh and Western Pennsylvania. For this reason, alone, it should be in every school and library, public or private, in Western Pennsylvania. The volume will be the authority on the Indian wars and uprisings in Pennsylvania for all time to come.

J. W. KING,

President of the Armstrong County Historical Society

List of Articles Presented to the Historical Society of Western Pennsylvania

491—Agreement of a Lease

between Nancy Fitz Charles of Allegheny County State of Pennsylvania & Casper Reel of Pine Township afforesaid County & State made April the 10th 1797. The said Casper Reel has let & leased thirty acres of land with Improvements situated on the West of his Trail where he is living now, jolning Carpenthers & others, from the first day of April one thousand seven hundred & Ninety seven untill one thousand eight hundred and two for the Space of five years; And in Consideration of the above mentioned Tract of Land with its two acres cleared & under Fence Cabin & the Afforesaid Nancy Fitz Charles is to give and deliver for the first year unto afforesaid Casper Reel fourteen Buchel of Corn; Said Casper Reel satisfying, paying or causing to be paid unto Afforesaid Nancy Fitz Charles four Dollars pennsylvania Currency for each and every Acre which shall be cleared & under Lawful fence the afforesaid two acres excepted;

When afforesaid Casper Reel is to receive and enjoy for the four following years, one thirth for each and every year what is & shall be croped of this Clearing of this present year. As for the Agreement of both Parties we have set hereunder our hands & seals this thenth day of April one thousand seven hundred & ninety seven

Wittnes present

his
Hugh (x) Dunn
mark

her
Nancy (x) Fitz Charles
mark

Casper Reel

Presented by
Mrs. R. A. McKee.

492—Letter

War Office Jany 22nd 1778

Sir

I am directed by the Board to enclose you the within Petition for the Consideration of the Commissioners & yourself As your Information & Advice is so abfolutely neceſsary at this Period when Meaſures are to be taken for future operations as well as a Review had of past Tranſactions by the commiſsioners ſent by Congreſs for theſe expreſs Purposes that your Request to be recalled cannot at this Time be complied with but it will not be forgot & if long Delayed it will be so from the Difficulty of finding a proper Perſon to replace you.

Davif applied for Paſsports in Philadelphia & was refused them he therefore acted in Defiance of the Authority of Congreſs & is I believe a ſuſpicious Character His Letters are sent on. You will pleaſe in future to Direct your public Dispatches to

Genl Gates as Prefident of the Board of War & any Services I can do as a member of that Board or in a private way shall ever be ready—

I have the Honour to be with Respect
Your obed- Servt-
Richard Peters

I have paid L12 to
Major Ewing which he
will account for with you---
On public Service
Brigadier General Hand
Fort Pitt

For'd by Major Ewing
War Office
Richard Peters---

Presented by
Col. O. S. Hershman.

493—Frame 30½x25½ Pittsburgh 1893
Painted by Joseph C. Beitler son of Joseph Beitler, keeper of Beitler's Tavern, East Liberty.

Presented by
Thomas Mellon II.

494—Round Frame 25½
Crewel-work floral design made in 1854 by twelve year old girl.

Presented by
A. M. Campbell.

495—Folio 15½ x 11
containing 100 mounted sepia photographs of Ohio River Improvement Celebration October 17 to October 20, 1929 and Lights Golden Jubilee October 21 to October 26, 1929.
These photographic records were presented to the Historical Society of Western Pennsylvania by the City of Pittsburgh through the Chairman of Finance Committee,

Presented by
Robert Garland.

496—Commemorative Folio 15½x11
containing photographs, press clippings, telegrams, letters and speeches pertaining to the Unveiling by the Historical Society of Western Pennsylvania of a bronze tablet marking site of World's First All-Motion Picture Theatre THE NICHELODEON and in memory of its creator Hon. John P. Harris, 1905-1929.

Presented by
Mr. Eugene L. Connelly.

497—Folio 17x12½
containing photographs of the interior and exterior of the History House Westmoreand-Fayette Branch of the Historical Society of Western Pennsylvania established by Miss Helen C. Frick as a memorial to her father the late Henry Clay Frick.

Presented by
Miss Helen C. Frick.

498—Volume—The Bridges of Pittsburgh
with 143 illustrations two maps—Bridge Map of Allegheny County and Car Route System of Pittsburgh Railways Com-

pany Showing Bridges Crossed—
Compiled by Joseph White, Engineer,
Department of Public Works, Allegheny
County, Pennsylvania—and
M. W. Von Bernewitz,
Mining and Metallurgical Engineer
United States Bureau of Mines.

Presented by
Joseph White.

Emma D. Poole,
Librarian.

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